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THE CHEMIST AND DRUGGIST

TELEGRAPHIC ADDRESS CHEMICUS LONDON

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Many of our customers, especially those abroad, having co-plained that when ARTICLES OF OUR MANUFACTURE have b n ordered through Merchants and Wholesale Houses, other ad inferior goods have been substituted, we beg to inform the Tr e that to insure the supply of OUR MANUFACTURES in future ll our BEST QUALITY GOODS will bear Trade Mark as annexed.

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Drugs and Chemicals.

14 lbs. cera flav. ang., at 1s. 2d. per lb. Saunders, Chemist, Walthamstow.

Quantity pure corrosive sublimate at 2s. 6d. per lb.; cash with order. Coatts, Chemist, Kirkcaldy.

Sp. vini rect, 53 over proof; manufacturing pharmacist has about 50 gallons for disposal, mostly clear, remainder simply requiring filtering; 18s. per gallon accepted, taking lot; cash with order. Sample on application to Butterworth, Bradford, Yorks.

4 lbs. pot. iodi, 9s. lb.; 1 lb. sodii iodi, 16s.; 2 lbs. sodii salicylas, 9s.; 2 lbs. iodoform pulv, 15s.; bismuth subnit., 6s.; 2 lbs. tinct. scillæ, 1s 6d.; 4 lbs tinct. gentian co., 1s. 6d; 6 lbs. acid salicylic, 6s. lb.; 2 ozs. pepsin porci, 3s. oz.; 2 lbs. ferri et quin. cit.; approval. 176/20.

Surplus after Stocktaking.—Oil rose geranium, citronell., H.G. oil mint, essence lemon super ess bergamot, super, acetic acid, beeswax, glycerine, 1260 chem. pure, black pepper. Calf. honey, sac. ustum., gold bronze; also 40 lbs. cyanide potash; insect powder; cod liver oil; price on application. Sowerby, Chemist, Middlesborough.

Proprietary Articles.

Three doz. 1s. 1½d. and 1-6th doz. 2s. 9d. Browue's renovating pills; what offers? good condition. Highway, Walsall.

Surplus Proprietaries.—1, 11s., 24, 2s. 9d. Brown's blood purifier; 2, 4s. 6d. assimilant; 6, 7½d. B. Taylor's antibilious pills; 1, 2s. 9d. Cooper's vital restorative; 1, 2s. 9d. infant's preservative; 3, 1s. 9d. Cupiss's horse balls; 1, 3s. 6d. Sandell's hair restorer; 1, 4s. 6d. hydroleine 12, 1s. 1½d. Pritchard's powders; 6, 1s. 1½d., 18, 7½d. Lowe's pills; half retail price accepted; no carriage; exchange entertained. Wright, Chemist, Burnley.

Soda-water Machinery.

No. 1 soda-water plant by Barnett & Foster, comprising 2-inch pump with 3-gallon gun-metal cylinder, for either hand or steam power, lead generator, gasholder, and all fittings and pipes, &c., complete; 1 single wiring stand; 1 Trotman's bottling machine and cage; 1 Trotman's syrup pump; 2 treadle bottle-brushing machines; 1 B size Mondollot's double generator with copper purifier and acid boxes, pipes, stand, and fast and loose pulleys complete. Apply, Idris & Co., Ascham Street, Kentish Town, London, N.W.

Formulæ.

Reliable recipes, 6d. each; full set of 130, neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

Insect powder, equals Dalmatian, costs 7d. lb., 2s.; German putz pomade genuine, 1s.; coloured mahogany polish, costs 4s. gallon, 1s.; furniture cream, like Adshead's, 1s. J. C., Lingdale Skelton Cleveland.

Think over this! To increase business and double profits, buy Brooks's recipes, warranted practical.—For half-crown order or stamps, recipes of following specialities (as sample) post free.—"Glycerine Cream," most elegant, economical, and efficacious remedy for chaps, frost bites, roughness of skin, &c. (superior to Beetham's), pays splendidly; "Tic Specific," wonderful remedy, cures like magic, conquers after all others fail; "Embrocatio Alb.," inseparable white oils, equalling Elliman's in utility and appearance; "Jubilee Sauce," cheapest, best, and most appetising sauce in creation, once tasted always bought. T. Brooks, Chemist, Louth, Lincs. Detailed printed list post free.

Literature.

Eleven "Year-books of Pharmacy," bound in green and gold, quite new, from 1874 to 1884; price 4s. each cash, or what offers? Woods, Harleston Norfolk.

"Medical Register," 1887; "Medical Directory," 1887; "Register of Chemists and Druggists," 1887; "Dentists Register," 1886; good as new; what offers? Griffith, Canterbury.

Photography.

To Photographers.—On sale, cheap, a Sheffield burnisher; will do carte, cabinet, and Imperial sizes, price 45s. Wilkinson, Fitzalan Square, Sheffield.

Shop Fittings.

Specie jars.—Two pairs, royal arms, &c., coronet covers, on mahogany stands, 36 in. high, 5l. 10s. a pair; one single ditto, 28 in. high, 45s.; a quantity of others from 25s.; dome-covered pink ointment jars, gold labelled, 3s. 9d. each; pill machines, mortars, funnels, measures, &c., &c.; dispensing scales, glass pans, 3s. 6d.; iron scales, 5s. 6d. E. Natali, 207 Old Street, E.C.

12-ft. wall fixture, drawers, lockers, shelving, cornice, in first-class condition, 8l. 10s.; 18 ft. ditto ditto ditto, 14l. 10s.; several others; 6 ft. nests of 30 drawers, gold-labelled and glass knobs, 2s. per drawer; 6 ft., 7 ft., 8 ft., 9 ft., 10 ft., 12 ft. mahogany top counters, as Maw's fig. A. 61, 6s. per foot run, stained and polished fronts; 13 ft. Spanish mahogany ditto, 9l.; 6 ft., 8 ft., 9 ft., 12 ft. plate-glass fronted counters, as Maw's fig. 63, very cheap. E. Natali, 207 Old Street, E.C.

Plate-glass sponge case, Maw's fig. A 41, 65s.; a ditto ditto, as Maw's fig. A 43, 95s.; show steps, A 37, 50s.; desk and glass case, as fig A 31, 60s.; another with silvered-glass back, 65s.; a 3 ft. ditto ditto, 80s.; several very elaborate dispensing screens, from 5 ft. to 8 ft. long, glass case at each side, silvered plate-glass centre, with marble slab in front, tablets on top of cases, "dispensing" "department," shelves at back for dispensing bottles (sketch on application), from 6l. 10s.; a 3 ft. dispensing screen, 54s; a 4 ft. ditto, also a 5 ft. and 6 ft. ditto ditto, and a 4 ft. 6 in. ditto ditto, all with tablets on top, as fig. A 55. E. Natali, 207 Old Street, E.C.

Wall cases, 4 ft. long, mahogany and plate-glass, as Maw's fig 88, 7l. 10s; 2 ft. 6 in. ditto as A 86, 4l. 10s.; a 6 ft 6 in. wall case, 4 ft. high, 4l. 10s.; a 4 ft by 4 ft. ditto, 6 in. deep, 3l.; one 3 ft. 6 in. long 6 ft. 3 in high, 75s.; an upright plate-glass case, 2 ft. 3 in. long, 3 ft. 6 in. high, 45s.; two mahogany and plate-glass air-tight wall-cases, 4 ft. 8 in. high, 9 ft. 6 in. long, 19 ft. long the two, each 10l. Counter cases.—2 ft. 6 in. bent plate-glass, as A 16, 45s.; 3 ft. ditto, 50s.; 3 ft. 6 in. ditto, 55s.; 3 ft. 9 in. ditto, 55s.; 5 ft. 6 in. ditto, ditto, 5l.; 3 ft. 2 in. ditto, ditto, 55s.; 6 ft. bent plate glass case, 9 in. wide, 3l. 10s; 8 ft. ebonized plate-glass ditto, 2 ft wide, 7l.; bent plate-glass tooth-brush cases, 2 ft. long, 45s.; 3 ft. plate-glass case, as A 4, 5l. 10s.; cigar cases with bent case top, 45s.; 6 ft., as fig. 18, 5l. 5s. E. Natali, 207 Old Street, London, E.C.

For sale.—Dispensing screen, 6 ft. long, mirror centre and marble slab, very handsome, 6l.; flat plate-glass counter-case, 54 in. long, second-hand, 50s.; 15 doz. new stoppered shop rounds and jars, gold labelled, 8l. 10s.; 12 ft. range pine drawers, french polished, with gold labels and glass knobs, 6l. 12s.; 12 ft. range mahogany ditto, with bevelled plate-glass labels, 9l. 10s.; dispensing case, 5 ft long, 4l. 10s.; desk and glass case, 55s; 6 4-gall. carboys, 10s. each; ebonized dispensing screen, second-hand, 54 in. long, 40s; ebonized wall case, 8 ft. long, 8l.; 24 4-lb. best pink jars, gold labelled, 4s. 6d. each; bent front toothbrush case, 30s.; 12 4-lb. blue jars, gold labelled, 30s.; 2 8 ft. nests second-hand drawers, painted mahogany, bevelled plate-glass labels, glass knobs, cheap. R. Tomlinson & Sons, Bond St., Constitution Hill, Birmingham.

Miscellaneous.

Brasher's old pattern mixer, 1 cwt., 10l. 165/9.

Rotary racking pump, Invicta, 3l. 10s. "Ozone," Cale Street Distillery, Chelsea.

Five dozen recess labelled bottles, little used, for sale; lists. Clark, Chemist, Dumfries.

Flower seeds, choice packet, 14 varieties, post paid, 15 stamps. Gardner Bros., Seedsmen, Tillicoultry.

Lady's pretty gold Geneva watch, chased, 35s. 180/2.

Two gross Smil's 3d. dyes, assorted, slightly soiled; 9l. dozen, 8s. gross, or offers. Holmes, Ringwood.

A No. 1 Pindar's rotary pill machine, with piping press, complete; what offers? Steele & Marsh, Chemists, Bath.

For sale, Southall's Materia Medica Cabinet, cost 1l. 10s, price 12s. 6d., approval. A. Appleton, Hessle Hall.

Microscopic objects, large variety, wel[l mounted]; list; approval. Henry Ebba[ge, Fram]lingham, Suffolk.

Surplus stock of patents, &c., for s[ale] or exchange; send for lists. Harri[s] Jones, Denbigh.

One thousand round pint cans with s[...], been used for petroleum, 5s. 100. [...]mpson, Bedworth.

What offers for ½ cwt. insect powd[er] 56 lbs. chlorodyne lozenges. 30 gross [...]. Putz polishing pomade. 179/10.

What offers for chemist's stock bott[les] (recess labelled), quite new, about 28 d[oz.]? No reasonable offer refused. Apply W. H. Webb, Chemist, Weston-super-Ma[re].

Bassinette baby carriage, twin, 4 bicy[cle] wheels, with brass-jointed reversible h[...] china handles; can be converted into e[...] or one, never used; take 38s. 180/2.

Simplissimus composing frame, com[plete], with four upper, four double, and four t[...]le two-third cases, new, price 2l.; sev[eral] small founts type, cheap; also large qua[ntity] shop rounds. Pearce, Chemist, Tavist[ock].

Surplus Stocks, Cheap.—Coriander s[...]; pine oil; 3 ornamental glass frames f[or w]indow (pretty); 1 cigar case; g. perc[h t]issue; fine ultramarine (paraffin oil sp[...] on it). Newham & Pickard, Druggists, Sh[ie]ld.

Just over old gold price.—Lady's w[atc]h and chain, rings (one diamond), lock[et], links; gentlemen's albert chain, ring, st[...] lady's silver necklace, brooch, bracelet, locket, &c. "Executor," Sea View, Glen[...] Villas, St. Leonards.

Cards, Counters, Cards.—Bezique, 2 pac[ks] 1s. 6d.; ordinary whist, pack 1s. 3d., used o[...] quite clean, worth double; counters, [imi]tation guineas, 2s. 6d. hundred; posted, or [ex]change for saleable drugs. Foster, N[avi]gation Street, Birmingham.

Quantity of folding cardboard boxe[s fo]r proprietaries, &c., 2½ by 2½ by 6½ in., s[...] green, at 4s. per 100; 11 sealing and [ca]pping instruments, ivory handles, leath[er c]overed case, lined silk and velvet, 11s., ve[ry c]heap, 5 scalers in case, bone handles, 2[s. 6]d. J. Jones, Kilnhurst, Rotherham.

Sponges.—Cresswell's carded sponges, [per]fectly clean and in good order.—6 doz. [...] 1 doz. on card, 6s. doz. cards, 6 ditto ditto, 12s. ditto, 6 ditto 3d., ditto, 18s. [di]tto, 8 ditto 4d., ditto, 24s. ditto, 8 ditto [...] ½ doz. on card, 18s. ditto; special discou[nt t]aking lot, Connor, Apothecary, Newry.

WANTED.

Attfield, eleventh edition. Lowest [pric]e to W. Barnaby, 19 Foregate Street, Ch[este]r.

Entire fittings (not fixtures) for chemi[st's] shop. 178/37.

Dispensing counter-case, fig. A 55, M[aw's] list. Cavell, Whittlesea.

Small Tipper's "Medical Discovery"; send price. G. Webb, Hitchin.

Pair 3-gallon carboys, cut stoppers. "C[hemist,]" 141 St. James's Street, Burnley.

"Enterprise" or good drug mill [c]heap. Nicholson, Chemist, Darlington.

Volumetric apparatus, metric system; [...] particulars. A. E., 2 Chapel Bar, Nott[ingh]am.

Plate-glass shelves, clean cut, or bevell[ed e]dges, send sizes, &c. Jones, McKintos[h P]lace, Cardiff.

Piesse's perfumery. A. W. Taylor, car[e of] Mr. Jas. Taylor, Church Street, New[...]rea, Manchester.

Copies of *The Chemist and Druggist* for J[an]uary 25, 1888; 4d. given per copy for [...] first 12 received. 13/88.

Large cisterns; also scales for weighi[ng he]avy weights; give full particulars. Dei[...]on & Smith, Bridgnorth.

New or second hand apparatus, with [...]ery-wheel complete, for marking glass. [Pu]blic Analyst, Swansea.

Fownes "Chemistries," Remsden's "[...] Chemistry," Ganot's "Physics." [...] Welton, Brough, Yorkshire.

Attfield's Eleventh Wills's "Materia [Medi]ca," ninth; good condition. State [...] to Watkinson, Farnworth, Bolton.

Recipes, by importer of Eucalyptus [...], for best products thereof. H. [...] 6 George Yard, Fenchurch Street, L[ondon].

Ganot's "Popular Natural Philosophy," [...] "Inorganic Chemistry," Henfrey's Botany," Armstrong's "Organic Chem[istry]"; good condition; last editions. [...] 134 Lisson Grove, N.W.

TO AERATED WATER MANUFACTURERS.

HAY'S SOLUBLE ✣ ESSENCES

ARE GUARANTEED TO BE THE FINEST IN THE MARKET.

HONOURABLE MENTION: INTERNATIONAL FOOD EXHIBITION, AGRICULTURAL HALL, LONDON, OCTOBER, 1880. GOLD MEDAL: SOCIETY OF ARTS, PARIS, 1883.

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"Supplies an excellent stomachic, appetising, and agreeable summer drink." *Brewers' Journal.*

"For this Essence a brilliant future may be anticipated. It possesses characteristics very seldom to be met with." *Mineral Water Trade Review.*

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"This is an excellent Non-alcoholic Beverage." *The Lancet.*

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HAY'S SOLUBLE ESSENCE OF JAMAICA GINGER.

A Pure Essence of the Finest Ginger, perfectly free from Capsicum. Highly adapted for the manufacture of **Transparent Aerated Waters**, and for all Dietetic, Medicinal, and Pharmaceutical purposes. **Trade Price, 5s. per lb.; 12 lbs. and upwards, 4s. 6d.**

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Specially prepared for the manufacture of the very Finest Ginger Ale made, is an addition of Vanilla, Lemon, and other flavours to the above. It imparts, with the exquisite **Ginger Aroma** of the above-mentioned Essence, a peculiarly fine fruity flavour, combined with the fullest amount of fragrance and pungency. **Trade Price, 5s. 6d. per lb.; 12 lbs. and upwards, 5s.** Quantity required, five fluid ozs. to each gallon of Syrup, making 106 10-oz. bottles.

HAY'S GINGER ALE EXTRACT. FOR SECOND QUALITY GINGER ALE.

This extract is strongly recommended for the manufacture of Ginger Ale, to which it imparts **Pungency, Colouring,** great **Brilliancy,** and an unusually **Fine Ginger Flavour and Aroma,** and makes a thoroughly good article. **Trade Price, 4s. 6d. per lb.; 12 lbs. and upwards, 4s.** Quantity required, three fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S GINGER ALE ESSENCE. Highly Concentrated. FOR THIRD QUALITY GINGER ALE.

This essence, which is a complete Bouquet of Flavours in a highly concentrated state, makes a Ginger Ale possessing an amount of aroma, flavour and quality that will be sure to command a large sale, and that is unsurpassed by the so-called finest Belfast Ginger Ale. **Trade Price, 9s. per lb.; 12 lbs. and upwards, 8s. 6d.** Quantity required, half a fluid oz. to each gallon of Syrup, making 106 10-oz. Bottles. This essence will be found most valuable to the general trade.

HAY'S GINGER CHAMPAGNE ESSENCE.

For the manufacture of Ginger Champagne. This Essence is a combination of the **finest flavours,** and imparts with the Ginger a **most exquisite aroma,** making a most delicious and refreshing approximation to Champagne. **Trade Price, 8s. per lb.; 12 lbs. and upwards, 7s. 6d.** Quantity required, ten fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS.

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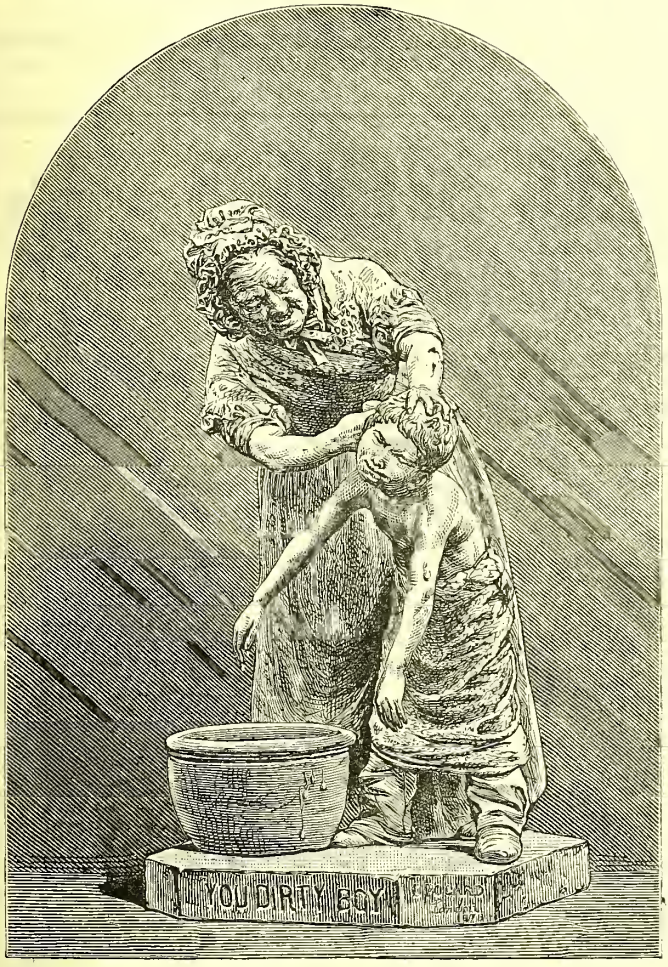

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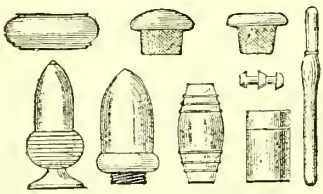

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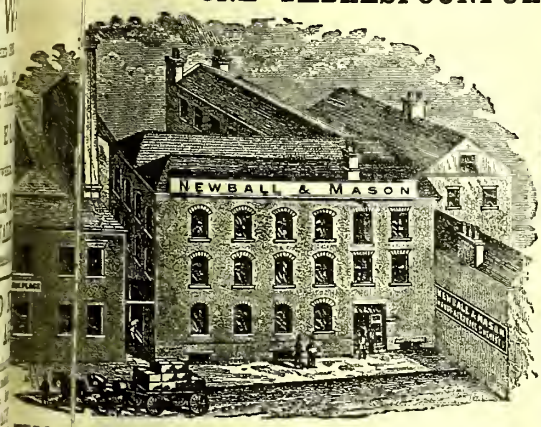

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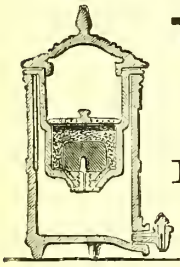

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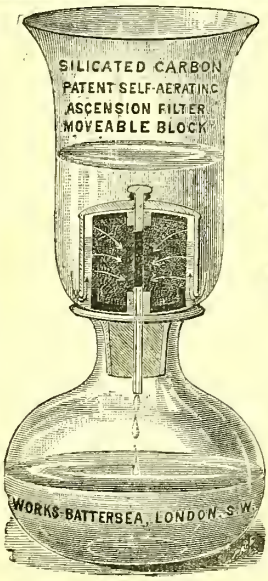

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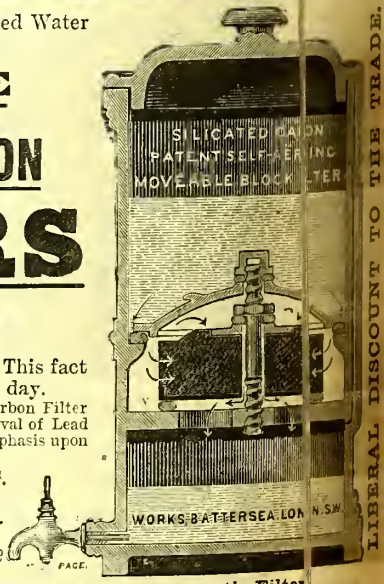

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PROPRIETOR having business elsewhere is de ous of disposing his Mixed General Retail Business at eal bargain to an immediate cash buyer; been under m ge- ment of assistant who is leaving; established 1812; in ain thoroughfare and centre of Plymouth; capable of eat extension. Maitland, 31 Chapel Street, Stonehouse, D n.

30 MILES OUT, in suburbs of large town; fit- able Retail and Prescribing Business, returning rly £500; almost unopposed; rent £17; valuable lease; ood 6-roomed house; large garden; price £325; owner b ght larger business cause of sale; only wants to be seen. A. W., Office of The Chemist and Druggist, 42 Cannon St C.

A GOOD-CLASS Retail and Dispensing Bu ess in the North of London; very busy locality; ex ent position; well stocked and handsomely fitted; very tle booking, and few patients; suit a pushing man; pro tor leaving England for family reasons; price £600. rti- culars from G. H., Office of The Chemist and Dru ist, 42 Cannon Street, E.C. Trial allowed.

EXCEPTIONAL Opportunity. — Old-estab ed genuine Chemist's Branch under management; ood market town near Birmingham; returns £400; pri ipal could soon double; no patents, and feeble opposition; rge shop, well fitted and stocked; good house; opening ich seldom presents itself; price £200; easy terms, £50 wn, balance instalments. "Drugs," care of Wyleys & Co., Co try.

BUSINESS of a Chemist, Stationer, and Book ler to be sold to an immediate cash purchaser; a va ble appointment attached, worth £100 per annum; situ in good village in South of England; long lease; stock, fi res, and goodwill, £1,200; no one need apply who canno m- mand purchase money. Apply, in first instance, to "Ph x," Office of The Chemist and Druggist, 42 Cannon St., C.

TO Chemists and Druggists.—To be disposed , a first-class Retail and Dispensing Business, near B en- head, established over 12 years; shop well fitted up; r rns about £600 per annum; a capital opportunity for an en etic person. For further particulars apply to John Thon on, Wholesale Druggist, 53 Hanover Street, Liverpool; to Roose, Mahon & Howorth, Chartered Accountants, 25 rth John Street, Liverpool.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED in May, an Improver; passed Prelim. Apply, 7 Corn Exchange, Sheffield.

OUTDOOR Assistant wanted; active and good salesman; no Sunday duty. Apply, with references, to T. C. Lindsey, 87 Leather Lane, Holborn, E.C.

JUNIOR Assistant, with good address, wanted for front counter in good Retail; outdoors. Send *carte* and full particulars as to experience and salary required, to G. C. D., 16 Robertson Street, Hastings.

WANTED, Agents in England, America, and the Colonies by a Dalmatian firm exporting Insect Powder. Please apply to B. P., care of The Chemist and Druggist, 42 Cannon Street, E.C.

CHEMIST'S Assistant.—Good counter hand, not over 30; experience of pushing retail preferred; no Sunday duty; outdoors. State salary and full particulars to W. Inman, 8 Shandwick Place, Edinburgh.

WANTED, steady, trustworthy Assistant, for Mixed Country Business; easy hours; in or out doors; state full particulars, references, salary, age, &c., and photo, to be returned. Mr. Heslop, Kingswinford, Dudley.

WANTED, at once, qualified Assistant for Dispensing department; also an Assistant, Junior, for Counter, the latter must have passed Preliminary; Haymarket Stores; hours 9 to 7. Apply by letter only, stating salary and other particulars, "The Chemist," 28 Haymarket, S.W.

THOROUGHLY competent Invoice Clerk wanted, in Wholesale Druggist's; must be quick and accurate, and furnish first-class references; one with knowledge of shorthand preferred. State fullest particulars and salary required to C. D. 40, care of Deacon's, Leadenhall Street.

WILLIAM HESELTINE & SON, Wilson Street, Finsbury, E.C., are open to engage a first-class man to introduce and appoint Chemists as Agents for their Teas; liberal terms to one having necessary qualifications (see full page advertisement appearing in this issue). Apply by letter, as above, in first instance.

TRAVELLERS on Commission wanted, for the sale of a well-known proprietary sold by chemists, grocers, &c.; liberal commission given; only those with good connection or representing first-class houses treated with. Apply, with full particulars, to "Comitia," care of Davies & Davies, 46 St. Mary's Axe, E.C.

WANTED, at once, by medical man, a Dispenser (indoors) for open surgery; only knowledge of retail and dispensing necessary; good opportunity for acquiring knowledge of minor surgery, teeth extracting, &c. State age, salary required, and other particulars, to "Surgeon," 1 Market Place, High Street, Plumstead, Kent.

A GENTLEMANLY Youth, as Pupil to Chemist; passed Preliminary preferred; premium moderate. Apply, Mr. Procter, Chemist, Penarth, S.W. Penarth is a popular seaside town, and one of the healthiest in the United Kingdom; business established in 1861, and is the leading business in the town; reference given to parent of present pupil.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyo

IMPROVER; 2 years' experience; Londo suburbs; 18. F. Timberlake, North Road, Brentfor

MANAGER; temporary or otherwise; qua long experience. M. J., 344 Mare Street, Hackn

BRANCH Manager or Assistant; in or out M., Preston-on-Wye, Hereford.

ASSISTANT; outdoors; aged 25; good refer T., 6 Julians Road, Kilburn, N.W.

ASSISTANT, Chemist's, Surgeon's; can tak charge. A. B., 52 Allen Road, Stoke Newington.

AS Assistant; outdoors; aged 27; married; lent references. H. F., Macklin Street, Derby.

MANAGER, or otherwise; really good refere long standing; salary moderate. C. T., 10 Avenue, Mortlake, Surrey.

AS Assistant; 7 years' Wholesale and Retail; references; Minor; tall. "Chemicus," 29 Bl Avenue, Leeds.

JUNIOR, in first-class Dispensing Establish 8 years' general experience; excellent reference F. R. Bower, Chemist, Macclesfield.

AS Assistant or Dispenser; part time; studyi examination; good references. "Assistant," 26 I Street, Nottingham.

JUNIOR or Dispenser; Minor and Hall qu tions; aged 24; disengaged; 8 years' experien or outdoors. W. T., 189 Upper Parliament Street, Liver

MR. SMITH, 4 Lodge Street, Bristol, Reg. Ch Manager during absence, illness, or branch prev disposal.

ASSISTANT; beginning of April; Minor; ag height 5 ft. 9 in. E. M. Carruthers, Mr. Rae, C Newmarket.

AS Assistant; aged 25; height 5 feet 6 inches extract teeth; good references; part or whole D, 5 Merrick Square, Borough, S.E.

MANAGER or Dispenser, Chemist or Su temporary or permanent. Dunkerly, M.P.S., 88 Road, Essex Road, Islington, N.

ASSISTANT; married; 34; three years ma good experience and references. B., 30 Man Street, Argyle Square, King's Cross.

IMPROVER; 2½ years' experience; 18 m dispenser to a doctor. "Alpha," 153 Greyhound Fulham, S.W.

AS Improver; 5 years' experience in Mixed passed Prelim.; excellent references. William 2 Claremont, Shrewsbury.

JUNIOR Assistant; time for study; town rences; abstainer. Cocker, Stationer, Ripp Halifax.

ASSISTANT.—Seaside; Douglas preferred season; moderate salary. G., Butterworth, C Bradford.

ASSISTANT or Branch Manager; aged 30; experienced; excellent references; disengaged. J. G. S., 451 Stockport Road, Manchester.

AS Manager or Senior; aged 29; outdoors; 14 years' first-class experience; Minor. "Alpha," 34 Myrtle Road, Leicester.

OUTDOOR Assistant or Branch Manager; aged 36; 4½ years in present situation; good references. "Chemist," 58 Fermoy Road, Harrow Road, Paddington, W.

SITUATION wanted (23) in Colour Manufacturer's Office; can make all common colours and lakes. H., 75 St. Paul's Road, Mile End, London.

IMMEDIATELY; as Assistant in London; good experience; first-class references; aged 27. "Amicus," 27 St. Margaret's Court, Borough.

ASSISTANT.—Outdoors; accustomed to Dispensing, Prescribing, Teeth Extraction, and Light Retail; aged 34; height 5 feet 10 inches; disengaged; satisfactory references. "Statim," 7 Quarry Street, Accrington.

AGENT.—Advertiser (Chemist) wishes to meet with a good Agency for a district in Derbyshire. Address, 180/23, Office of The Chemist and Druggist, 42 Cannon Street, E.C.

MANAGER, Traveller, or any responsible position; 13 years' experience; habits strictly temperate; good references and address; aged 29; married. "Manager," 20 Princes Street, Landport, Hants.

MANAGER, to reside on premises; aged 27; married; no family; can extract and stop teeth, also take impressions for false teeth; 13 years' varied experience; at liberty at month's notice; in present situation 3 years; satisfactory reasons for wishing to change; undeniable references. "Chemicus," 22 Addison Road, Heaton, Newcastle-on-Tyne.

SENIOR Manager, or Assistant; good refer ces; first-class experience; qualified, competent, and rust-worthy; aged 27. Byams, Fitzhead, Taunton.

APPRENTICESHIP.

3s. 6d. for fifty words; 6d. for every 10 words beyo .

AN Apprentice is wanted in a first-class Pha acy in a fashionable health resort. Apply to Mr. G. G bons, The Central Pharmacy, Weston-super-Mare.

MISCELLANEOUS.

Special charges are made for Advertisements under this ding, which can be obtained on application.

HAMBURG AGENCY.—Gustav Pabst, Co mission Agent, Hamburg, established 1883, is n to represent British and Colonial firms, and invites corr ond-ence. Sales and purchases upon the most favourable erms for cash. Shipping and insurance attended to. Bes efer-ences in London and country. N.B.—Will visit E land shortly, when arrangements may be made personally.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will able them to pass with ease. Enclose stamped envelope Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Esta ished 1872. References to past and present Pupils. 32 upils passed the last Examinations.

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PRELIMINARY.—Arithmetic and Metric S tem, 1*s*. How to Write an Essay, 3*d*. Cæsar Simpli d, 1*s*. Knotty Points in Latin Grammar, 1*s*. 6*d*. Minor.—Ec tions Simplified, 1*s*. Illegible Autographic Prescriptions, 1 Notes on Dispensing, 1*s*. Prescriptions given at the Mi , 6*d*. "Chemist," care of Mr. J. Edwards, Wye, Kent.

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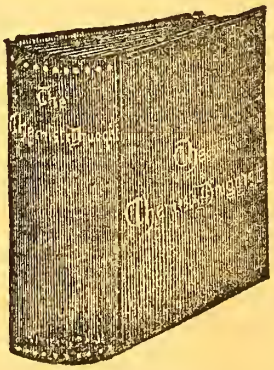
The reading cases which we offer to subscribers are now used by a very large number of chemists, and are found very convenient. They keep together thirteen numbers in very tidy form, always ready for reference. By having two cases in hand the numbers of a complete volume are al ays available until the me comes for binding. We sell these cases at the ice for 1*s*., or by parcels ost 1*s*. 3*d*., or two for 2*s* 3*d*. We cannot forward the to any house for enclosure or by any of the carriers, in the latter case we hav to pay for booking.



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BEST GOODS. LOWEST PRICES.

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THE MOST DELICIOUS SAUCE IN THE WORLD.

To Chops and Steaks, Fish, &c., it is incomparable. In Bottles, 6*d.*, 1*s.* and 2*s.* each.

CAUTION.—*On each Yorkshire Relish Label* is a Willow Pattern Plate and name, Goodall, Backhouse & Co. No other is genuine.

Goodall's Baking Powder

THE BEST IN THE WORLD.

Makes delicious Puddings without Eggs, Pastry without Butter, and beautiful light Bread without Yeast. In 1*d.* Packets; 6*d.*, 1*s.*, 2*s.*, and 5*s.* Tins.

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The best, cheapest, and most agreeable tonic yet introduced. In Bottles, 6*d.*, 1*s.*, and 2*s.* each.

Goodall's Custard Powder

For making delicious Custards without Eggs, in less time and at half the price. Sold in Boxes, 2*d.*, 6*d.*, and 1*s.* each.

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Is acknowledged by all to be the most convenient and economical preparation ever introduced, as, by its use, a most Rich and Delicious Blancmange may be produced in a few minutes at a trifling cost, and may be had of various flavours, *i.e.*, Raspberry, Strawberry, Lemon, Almond, and Vanilla. Sold in Packets, 6*d.* and 1*s.* each.

Goodall's Egg Powder

Acknowledged to be the only real substitute for eggs yet discovered. Its action on Cakes, Puddings, &c., &c., resembles that of the egg in every particular, enriching them in colour and flavour, rendering them most wholesome and nutritious. One sixpenny tin will go as far as twenty-five eggs. In 1*d.* Packets; 6*d.*, 1*s.*, 2*s.* Tins.

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A Monthly Price List of Druggists' Sundries, Patent Medicines, &c., can be had Post Free on application.

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CHEMICAL LABORATORY.
54 Holborn Viaduct, E.C., London, [illegible] 7, 1887.

Messrs. THE INTERNATIONAL PATENTS ASSOCIATION.

Dear Sirs,—Having submitted the sample of DE MIEL'S BISCUTS *lately received from you to a careful chemical analysis, we are enabled to rep[illegible] upon them as follows:—*

These Biscuits have been found to contain considerable proportions [illegible] nitrogenous matter and of carbo-hydrates; they are also especially rich in salts, w[illegible] include a large amount of combined phosphoric acid. The flesh-producing, [illegible]t-giving *and* bone-forming *constituents of food are thus all represented in the [illegible]uits.*

A satisfactory feature is absence of excess of moisture, the baking ha[illegible] evidently been conducted with care.

The Biscuits possessed an agreeab'e flavour; and they can be pronou[illegible] to be well made and of good quality.—We remain, faithfully yours,

ARTHUR HILL HASSALL, M.D., L[illegible],
Author of "Food: Its Adulterations and the Methods for their [illegible]ection."
EDWY GODWIN CLAYTON, F.I.C., [illegible].S.

A Liberal Discount to the Trade. Circulars and Particulars on [illegible]lication.

The INTERNATIONAL PATENTS ASSOC[illegible]TION,
15 NICHOLAS LANE, LONDON, E.C.,
MANUFACTURING CHEMISTS AND SUNDRIES[illegible].

Edwards' Desiccated Soup.

BY ROYAL LETTERS PATENT.

HIGHEST AWARDS:
International Health Exhibition, LONDON, 1884.
International Exhibition, LIVERPOOL, 1886.

Consists of the finest Vegetables and Extract of Beef in a dr[illegible]ate.

The Manufacturers beg to direct the attention of the Trade to the abov[illegible] tic'e, now commanding a ready and remunerative sale. It is put up in a neat a[illegible] attractive form, in 1-lb., ½-lb., and ¼-lb. tins, to sell at 1s. 3d., 8d., and 4½d.; al[illegible] packets containing 1 oz. at 1d. These are packed in cases of 36 1-lb., 48 ½-lb. [illegible] 72 ¼-lb. tins; the 1d. packets in gross and half-gross boxes, in cases of 12 gr[illegible] carriage-tins, and cases free. A liberal supply of Show Cards, Glaciers, and pr[illegible] matter, consisting of Circulars, Medical Testimonials, Press Opinions, and [illegible]ter Bills bearing name and address.

Sample, with Terms, free on receipt of Business C[illegible].

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3 and 6 CAMOMILE ST., [illegible].C.

Savaresse's Capsu[illegible]es.

SAVARS CUBEB CIGARETT[illegible]S.

SAVARS CUBEB CIGARETTES.

Cubebs, Stramon[illegible]n, and Cannabis Ind. (s[illegible]hing). Relief in Asthma Throat Cough, Bronchiti[illegible] Influenza. A specific [illegible]gainst Fogs.

Boxes (12) 1*s.*, 9*s.* [illegible] doz.; (36) 2*s.* 6*d.*, 24*s.* [illegible]r doz.

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SAVARESSE'S CAPSULES, SANDAL WOOD; COPAIBA.

Savaresse's Capsules of [illegible]mbrane, each containing 15 drops [illegible] Maran-[illegible]ham Copaiba Balsam, or, [illegible] of mem-[illegible]brane, each containing 10 [illegible] Pures[illegible] Yellow Sandal Wood Oil. [illegible] efficacy [illegible] of these valuable medic[illegible] is due to the absolute purity of [illegible] Balsam or Oil, and to the very gr[illegible] solve-[illegible]bility of the membrane [illegible]mpared with gelatine.

Copaiba, 2*s.* 6*d.*, 18*s.* doz [illegible]andal, 4*s.* 6*d.*, 36*s.* do[illegible]

EVANS, LESCHER [illegible]EBB,
LONDON.
EVANS, SONS [illegible]O.,
LIVERPOO[illegible]

FREE TO CHEMISTS.

AN NTERESTING PHOTOGRAPH AND A STEEL ENGRAVING.

Fr *The Chemist and Druggist*, February 11:—Messrs. Burroughs, Wellcome & Co. are sending out to their custome in their packages an elegant calendar, bearing a fine engraving of Niagara Falls.

Fr *The Chemist and Druggist*, February 18:—We have received from Messrs. Burroughs, Wellcome & Co. an excellen hotograph of their American Exhibition Show-case, Woodburytype copies of which they are willing to give to those ho may apply for them. The subject of the photograph has exceptional interest, the show-case itself being made fr the beautifully-carved wood screen which the firm bought from the Indian Government. This occupies the centre c he picture, to the left of which is the silver fountain from which the fascinating perfumes of Lundborg flowed during t whole time the Exhibition was open. The most interesting part of the picture comprises two groups of North Americ Indians with their squaws, who occupy picturesque positions in the foreground, and add to the attractiveness of the pict as a counter show-card.

NOTE.

We all be happy to present to any Chemist upon request a copy of each of above-mentioned artistic prints. They can be s t by post, but with greater safety as an enclosure with goods from ourselves or any London House.

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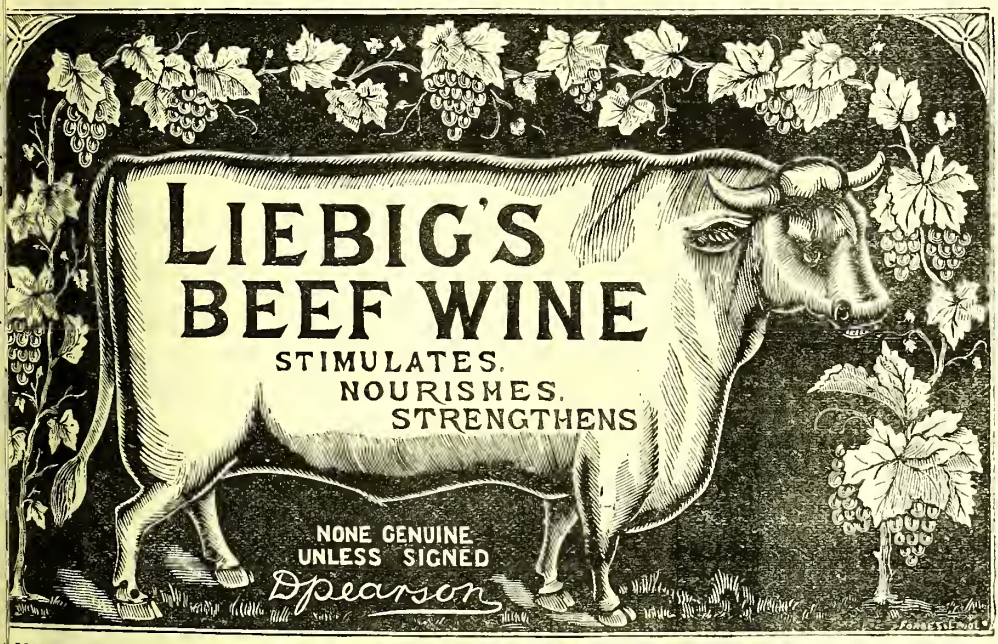

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CHIEF INGREDIENTS—
Essence of Beef, Choice Port Wine, Extract of Malt, and Quinine.

NO WINE LICENCE NECESSARY FOR ITS SALE.—*See Letter from Excise.*

Pints s. 9d., 21s. per dozen; quarts 4s. 6d., 39s. per dozen. Write for samples.

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"RA ORNIE." LIEBIG'S Extract of Meat.

The only Brand supplied to the War Office.

7-lb. Tins	per lb.	5/11	each	41/5	4-oz. Jars	per lb.	6/7	per doz.	19/6
1-lb. Jars	"	6/2	per doz.	74/0	2-oz. Jars	"	7/0	"	10/6
½-lb. Jars	"	6/4	"	38/0	1-oz. Jars	"	7/8	"	5/9

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C. *6 lbs. Carriage Free.*

FIRST ARRIVAL OF THE NEW SEASON'S

"A1" COD LIVER OIL.

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The season has proved exceptionally favourable for the production of fine Oil—indeed, in our own district in Norway, so far, it is the best ever known.

The livers are so fat, and in such splendid condition, that they yield nearly double the usual quantity of Oil, so that, notwithstanding the price of fish is higher than last year, WE ARE ENABLED TO OFFER THE NEW OIL AT THE

REDUCED PRICE OF 7/0 PER GAL.

Or by 12 Winchesters 6/9, or 36 Winchesters 6/6 per gallon to order.

To enable Chemists to give the new Oil a trial, we offer for the present to Pay Carriage, to any part of the United Kingdom, on parcels of not less than 12 Winchester quarts of Oil.

THE "A 1" COD LIVER OIL is the best Oil for Winter Sale.

THE "A 1" COD LIVER OIL is made at our own factory, Balstad, Norway.

THE "A 1" COD LIVER OIL we guarantee to be made only from the fresh livers of the Cod Fish, which have been carefully selected by our own workmen.

A sample of the New Oil sent post free on receipt of business address card.

THE MODEL NORDLAND BOATS, FOR SHOP WINDOWS, AT 10/ EACH, ARE ONLY SUPPLIED TO PURCHASERS OF THE "A 1" COD LIVER OIL.

Illustrated Circulars for counter use supplied. Names and addresses of customers will be printed as Agents.

We have just published a New Medical Circular; these, together with neatly-packed Samples of Oil, will be sent when required.

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THE "EN NORSK FISKER" LABELS, IN COLOURS, ARE NOW SOLD AT 2/- PER 100

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ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

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[See Eau de Cologne.]
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Evans, Sons and …
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Hall's Wood Vio…
Greensill, T. S., …l Sons (Moaa Bouquet)
Mack, H.
Mann, C. A., an…o.
Maw, Son and T…pson
Newbery and Sons
Pear's Soap (Dir…oy)
Sainsbury, S. (L… Water)
Sanger and Sons
Treatt, R. C.
Warrick Brothe…
West, T. (Okell'…ons)
Whitaker & Gro…th
Woolley, Sons an…. (Powds)

PEPPERMINT
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Todd A. M. (C…tal White Oil of Pepperm…

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Fletcher, Fletche… Stevenson
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Warner and C… Ingluvin)
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Marion and Co.
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Barron, Sq and Co.
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Burgess, W ws, Francis
Burgoyne, rbidges
Burroughs llcome Various)
Duncan, F hart
Evans, Son d Co.
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Hearon, Sq s and Francis
Hewlett an ons
Hill, A. S. d Son
Hooper, B. d Co.
Howards a ons
Keith (Con ictures)
Martindale troglycerine)
Sellers, J.
Southall Br
Typke & K
Woolley, S
Wyleys (V ns)

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Beecham, mas
Evans, Son d Co.
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Hooper, D
Kerfoot, T gar Coated)
Lorimer an o.
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Morrison a Co.
Newbery a ons
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Maw, Son Thompson
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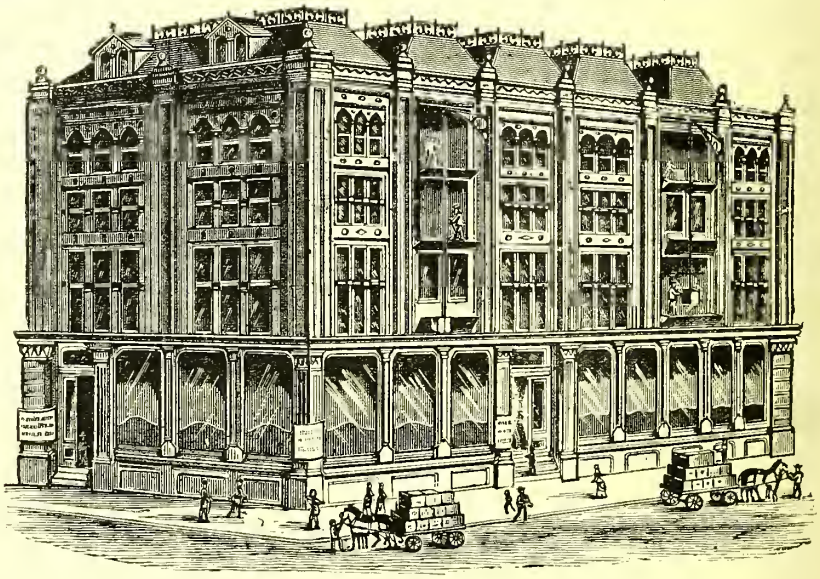

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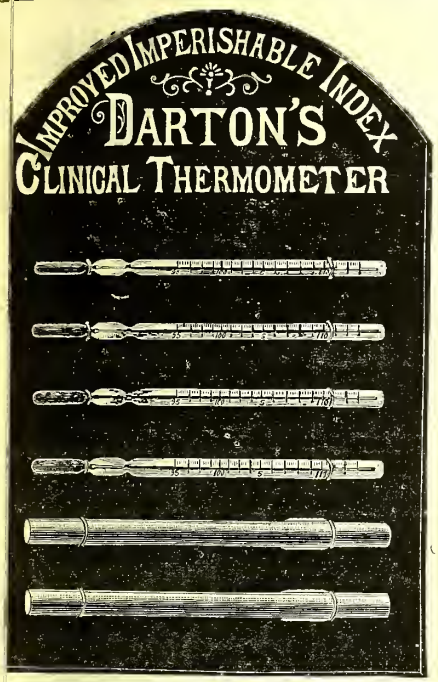

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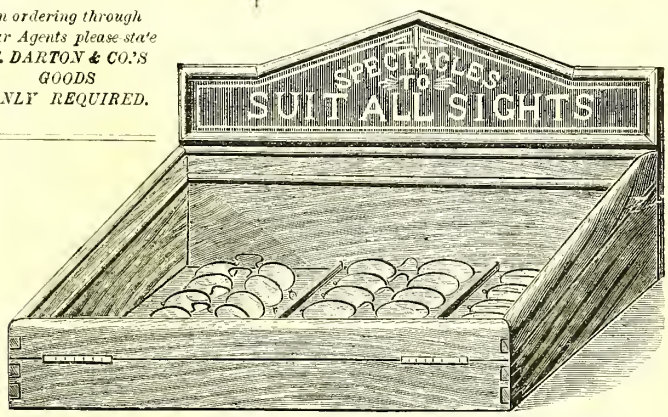

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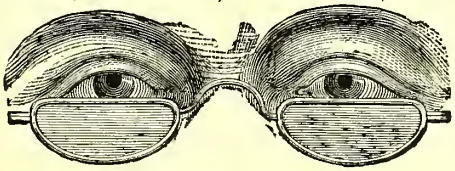

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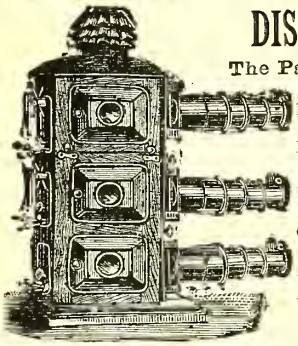

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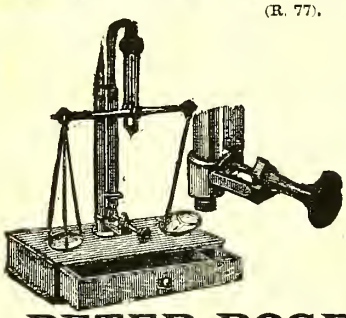

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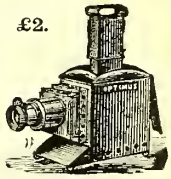

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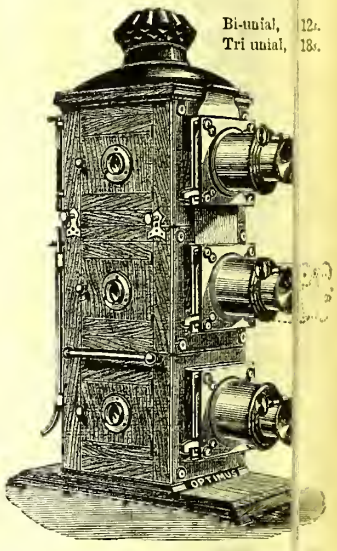

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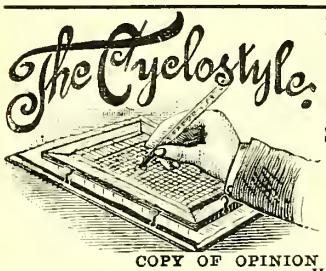

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THE CHEMIST AND DRUGGIST

ESTABLISHED 1859.

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EXPORT TRADE.—Copies of next week's number of THE CHEMIST AND DRUGGIST will be sent to all shippers of drugs, chemicals, and druggists' goods generally throughout the United Kingdom. Many of these will file that issue, in order to have by them a convenient guide for buying when their indents include any goods of the classes named. Manufacturers and dealers who have not already sent in advertisements for this important issue should do so without delay.

THE MIDLAND PHARMACEUTICAL ASSOCIATION OF NEW ZEALAND.—This journal is henceforth to be supplied to every member of the above Association. This makes the seventh pharmaceutical society with which similar arrangements are in force.

The Chemist and Druggist of Australasia.

FEBRUARY 1, 1888.

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New Zealand.—Pharmacy Board Official Report—The Result of the Examinations—The Midland Pharmaceutical Association—Prosecution under the Sale of Poisons Act.

Queensland.—Pharmaceutical Society (Report of Meeting)—Examinations—The Quicksilver Mines.

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Western Australia.—Patent Medicines and Infant Mortality—Patent Medicines and the New Tariff.

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(Copies may be obtained at the London Office, 42 Cannon Street, E.C., 6*d.* each, or the journal will be supplied to extra Australian subscribers at 5*s.* per annum.)

DIARY FOR NEXT WEEK.

Secretaries of societies are requested to send early information of approaching meetings.

Monday, March 12.

Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. Cantor lectures. "Alloys," by Professor W. Chandler Roberts-Austen, F.R.S.

Tuesday, March 13.

Royal Institution, at 3 P.M. Professor G. J. Romanes, on "Before and After Darwin."

Wednesday, March 14.

Royal Microscopical Society, King's College, W.C., at 8 P.M. Mr. G. Massee, on "The Type of a New Order of Fungi."

Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. Ordinary meeting. "Agricultural Education and Dairy Instruction," by Professor John Wrightson.

Pharmaceutical Society, 17 Bloomsbury Square, W.C. "Cocaine and its Salts," by Dr. B. H. Paul. "Note on Striated Ipecacuanha," by Mr. Francis Ransom. "The Identification of the Chinese Bark attributed to Pterocarpus Flavus," by Mr. P. W. Squire, F.L.S.

Thursday, March 15.

Chemical Society, Burlington House, W., at 8 P.M. Ballot for the Election of Fellows.

Chemists Assistants' Association, 103 Great Russell Street, W.C., at 9 P.M. Musical and Social Evening.

Liverpool Chemists' Association, Stork Hotel, Queen's Square (not at the Merchants' Dining Rooms, as announced last week), at 8 P.M. Annual Dinner.

Linnean Society of London, at 8 P.M. (1) "Monograph of the *Thelephoreæ*," by George Massee. (2) "Descriptions of Three New Marine *Algæ*," by Edward A. L. Batters. (3) "Exhibition of the *Os frontalis* of a Hornless Stag, with Remarks on such Abnormality," by J. E. Harting.

Royal Institution, at 3 P.M. The Rev. W. H. Dallinger on "Microscopical Work with recent Lenses on the least and simplest Forms of Life."

Friday, March 16.

Royal Institution, at 9 P.M. John Murray, on "The Structure, Origin, and Distribution of Coral Reefs and Islands."

Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. Indian section. "The Origin, Progress, and Influence of Universities in India," by F. J. Mouat, M.D.

Saturday, March 17.

Royal Institution, at 3 P.M. William Archer, on "The Modern Drama: Scandinavian."

Society of Arts, John Street, Adelphi, London, W.C., at 3 P.M. Dr. Mann lectures. "Protection of Buildings from Lightning," by Professor J. Oliver Lodge, D.Sc., F.R.S.

Metropolitan Reports.

In Memoriam.—Monday was the anniversary of the birth of the late Jacob Bell, and in respect to his memory an ardent admirer had placed on the marble bust of Mr. Bell, which stands in the vestibule of the Pharmaceutical Society's house, a card bearing the following inscription:—

In Memoriam.

JACOB BELL. B. March 5, 1810; D. June 12, 1859.

Verum hic tantum alios inter caput ertulit alte,
Quantum lenta solent inter viburna cupressi.

Chemists' Assistants' Association.—At the meeting of this association, held on Thursday evening, a very interesting paper on the "Perfume Industry of Grasse" was read by Mr. F. W. Warrick, a member of the firm of Warrick Frères, of Grasse and of London. The author gave details of the cultivation and extraction of the orange flowers, leaves, and fruit of the eucalyptus, myrtle, lavender, geranium, rose, mignonette, and violet. These details will be given in full in The Chemist and Druggist next week.

Serious Charge against a Chemist's Assistant.—At the Southwark Police Court on Tuesday, James Atkinson, 30, assistant to Mr. Kent, chemist, of 226 Blackfriars Road, was charged with assaulting Sophia Flynn, a young married woman. The prosecutrix stated that she went to the shop for some pills for her mother, and on being served by the prisoner she complained to him of pains in the chest. He asked her into the parlour, and behaved in an improper manner to her there. She pushed him away, and left the shop. There were some women in the shop as she was leaving it, but she did not complain to them of the prisoner's conduct. She told her mother directly she got home. Corroborative evidence was given. The prisoner, who reserved his defence, was committed for trial, bail in two sureties of 25*l.* each being accepted.

Society of Chemical Industry.—A meeting of the London section was held in the rooms of the Chemical Society, Burlington House, on Monday evening at eight o'clock, Professor Dewar, F.R.S., president of the society, in the chair. The attendance was unusually large, amongst those present being representatives of the most important alkali-works in the kingdom. We observed in the audience Sir F. A. Abel, J. E. Stevenson, M.P., Mr. A. Allhusen (Gateshead), Dr. D. B. Hewett (Brunner, Mond & Co.), Mr. John Hargreaves (Widnes), Mr. T. Snape (Widnes), Mr. Eustace Carey and Mr. Gaskell (of Gaskell, Deacon & Co.), Mr. D. Gamble (St. Helens), Mr. P. J. Worsley (Bristol), Mr. J. Brock (Widnes), Mr. Muspratt, Mr. E. C. C. Stanford (Dalmuir), Mr. Claus, Dr. R. Messel, Mr. J. Heaton (Manchester), Mr. Castner, Mr. A. E. Fletcher (H.M. Inspector Alkali-works), Mr. David Howard, Mr. T. Tyrer, Professor Armstrong, Dr. C. R. A. Wright, Mr. Kingzett, and many others connected with chemical industry. After the usual preliminaries, the chairman called upon Mr. Alexander M. Chance, F.C.S., of Birmingham, to read his paper on "The Recovery of Sulphur from Alkali Waste by means of Lime-kiln Gases." The principal points of this paper will be found on another page. The paper was fully illustrated with specimens of the by-products, and Mr. Chance gave peculiar force to his communication by using a gigantic block of brimstone as a reading-desk. The paper was well received by the audience; and in the discussion which followed, Sir F. Abel, Mr. Stevenson, M.P., Mr. A. E. Fletcher, Mr. Brock, Mr. Allhusen, Mr. Howard, Dr. Hewett, Dr. Alder Wright, Mr. Newall, and the chairman took part.

The Charge of Perjury brought against Mr. John Milton Oxley Emmerson, pharmaceutical chemist, of Great Grimsby, came before the Central Criminal Court on Monday. It will be remembered that the charge was brought by a Mr. Perryman, and was in connection with a company which the prosecutor had promoted. The defendant had made certain statements in an affidavit he had made which the prosecutor alleged were untrue, and respecting which this charge was brought. In the examination before the magistrate the witnesses for the prosecution were subjected to a very damaging cross-examination by Mr. George Lewis, and the magistrate proposed to dismiss the summo[illegible] But Perryman elected to be bound over to prosecute ur[illegible] r the Vexatious Indictments Act, in order to take the opin[illegible] of a jury. When the case came on on Monday Perry[illegible] was called up on his recognisances, but did not answ[illegible] Mr Grain, on the part of the defence, said that the d[illegible]ndant was a respectable and honourable man, who ought [illegible]er to have been placed in his present position. He we[illegible]on to argue that upon the facts there could be no doubt [illegible]t the company in question was a fraud, and that it was i[illegible]tituted for the purpose of robbing the public, and that it [illegible]s very doubtful whether any such property as that referr[illegible] to in the prospectus was in existence. The Recorder [illegible]aving summed up, the jury immediately returned a ve[illegible]ct of "Not guilty." Mr. Grain then applied to the learn[illegible] judge to impound various documents that had been p[illegible] in in evidence for the prosecution, that the recognisanc[illegible]f Mr. Perryman should be estreated, and that an order [illegible]uld be made upon him to pay the costs of the prosecuti[illegible]. The Recorder granted the application.

Provincial Reports.

Items of news, and newspapers containing matter [illegible] inter-est to the trade, sent to the Editor, will much oblige

BARNSTAPLE.

Accident.—During the progress of a fire on [illegible] day at Rawleigh, near Barnstaple, an accident happene[illegible] to Mr. Henry Dalgleish, a commercial traveller, who repr[illegible]nts the firm of Ford, Shapland & Co., medical label printer[illegible] London. Mr. Dalgleish was assisting in removing the bool[illegible] and in doing so some timber fell, and his right foot wa[illegible] slightly crushed, and his big toe joint dislocated. He was [illegible]tended to by Dr. Laing. On Sunday he was removed to h[illegible]ome at Exeter. It will be some little time before he will [illegible]able to resume his duties.

BIRMINGHAM.

Midland Counties Chemists' Association.—[illegible] understand that at a meeting of the council of this a[illegible]ciation, held last week, it was decided to alter the day [illegible] meeting from the Thursday to the Tuesday. The annual ba[illegible]eld this year under the auspices of the association was stat[illegible] to have resulted in a deficit of over 10*l.* We are pleased to[illegible]arn that this sum is much higher than the actual loss.

The Pharmacy Bill.—At a meeting of the cou[illegible]il of the Midland Counties Chemists' Association held on F[illegible]uary 27, the following resolution was proposed by M[illegible] Barclay, seconded by Mr. Parry, and carried unanimousl[illegible]—"That this council is of opinion that the Pharmacy Act A[illegible]ndment Bill deserves the general support of the whole of [illegible]e pharmaceutical body; and, further, it considers tha[illegible] passed into law it will be the means of affording better [illegible]otection to the public. It would, however, urge upon th[illegible] Pharmaceutical Council the claims of assistants who, [illegible]aving a vested interest in the business, are entitled to s[illegible]ial consideration; and therefore recommends that p[illegible]sion be made in the Act by which they may be allowe[illegible] qualify by passing the present examinations beyond the y[illegible] 1893."

Society of Chemical Industry.—A mee[illegible] of the Birmingham and Midland section of this society [illegible] held at the Mason College on Wednesday night (Profe[illegible]r Tilden presiding), when Mr. T. Bayley, F.I.C., F.C.S., co[illegible]ibuted a "Note on the Function of Bone Ash in China Ma[illegible]." The lecturer explained that experiments which had [illegible]en made threw considerable light upon the function of bon[illegible]sh in the manufacture of china. He had made experiment[illegible] with the following mixtures: (1) bone ash, 7 parts; chi[illegible] stone, 4 parts; kaolin, 4 parts. This, which represente[illegible] the usual china mass, was mixed with water and moulded [illegible] a small article, and after drying was fired. The result [illegible] a good translucent specimen of china. (2) In another ex[illegible]ment the following ingredients were used:—Seven parts of [illegible] calcium phosphate, with kaolin and china stone as befor[illegible] The out-

com was a sample of white stoneware quite devoid of tran arency. This result effectually demolished the theory of usibility and enamel formation on the part of the phos ate. (3) In this instance five parts of calcium phosphat were employed with the addition of two parts of calc n carbonate (equal to $1\frac{1}{10}$ part of calcium oxide or lime and the same proportions of clay and stone as before. The roduct was true semi-transparent china, equal in all resp ts to ordinary china, as far as could be judged from the sma specimen. Trial No. 2, therefore, seemed to clearly show that china did not owe its transparency, to any reponderating extent, to the china stone, although, of ourse, the stone must have some effect in that rection. Experiment No. 3, on the other hand, established the great effect exerted by the lime in bone-ash in producing translucency. Other experiments showed that pure hosphate of aluminium, prepared without the use of alka e salts, behaved exactly like pure calcium phosphate in the blow-pipe flame and even, being apparently quite unaffected. Either of these substances, made by precipitation with odium phosphate, fused readily, even after considerable wash g, the liquefaction being produced by small traces of alka bstinately retained by the precipitate. The fusibility of bone-ash could not be explained, and was doubtless due to the ca. It might be concluded that in the indecomposible natu of calcium phosphate, under circumstances analogous to the e of the alkaline separation, lay the potency of phosphat of calcium for the operations of the potter. In other word this phosphate remained unattached and isolated, and, ing infusible at the heat of the oven, afforded a support the glassy substances formed by the mutual action of the ali of the china stone, the lime of the bone-ash, and the ca and alumina of the remaining ingredients. On the moti of the chairman a vote of thanks was passed to Mr. Bayl for his paper. Afterwards Mr. W. W. J. Nicol, M.A., D.Sc exhibited a new mercurial air-pump.

BURNLEY.

Po ONING WITH VERMIN-KILLER.—An inquest was held at the Princess Alexandra Hotel, Colne Road, last week, regard g the death of Annie Brockbank, 18 years of age, who had ommitted suicide by taking vermin-killer. She had been lisappointed in love. Vincent William Jackson, assista for Messrs. Collins & Co (Limited), druggists, Colne Road deposed to deceased calling at the shop and asking for a th epenny packet of mouse poison. They had not a three enny packet, so she took two twopenny packets. He ente d it in the poison-book, and cautioned her to be very care . Dr. Ferguson deposed to death being due to strychnine oisoning, and a verdict was returned accordingly.

DAWLISH.

S ALING FROM A CHEMIST.—On March 1 a tramp nam Ellen Williams was charged at the Police Court with steal g one bottle of cod-liver oil and one pot of tooth-paste, the pperty of P. W. Hanson, chemist. The prisoner came into r. Hanson's shop begging, and took the articles from the unter. Prisoner pleaded guilty, and was sentenced to one lendar month's imprisonment with hard labour.

LEEDS.

S IOUS CHARGE AGAINST A CHEMIST.—At the Town Hall n Wednesday Owen Stafford, at one time in business as a ch ist at Hyde, near Manchester, and now assistant to a chemist at Morley, was charged with stealing from the custody of its mother a child of three weeks old. It appears from statement of the mother, a girl of seventeen, named Woodhouse, who had been a servant to Stafford's sister, that whi he was on a visit to his sister he seduced Woodhouse, afterards getting her to move to Morley. She only lived three weeks there, and went to Leeds, where the baby was born on February 5. On the 26th of the month Stafford visit Woodhouse, and took away the baby in a handbag, stat g that he was to place it out to nurse in Morley. Woodhou was averse to this, and followed him to Morley. Stafford refu d to say where the child was, and when the police made inq ies he gave them the name of an unknown person in Gos rt, who, he said, had the child. No trace of the child could be got. In granting the application for the remand of the prisoner, the magistrate observed that the charge might probably develop into a very serious indictment. The Leeds police have issued a notice headed "Supposed Murder," in which it is stated that it is supposed that the child may have been thrown down a disused coal-mine, or into the river or canal between Leeds and Morley.

LIVERPOOL.

LIVERPOOL CHEMISTS' ASSOCIATION.—Owing to the illness of the proprietor, the annual dinner will not be held in the hotel stated last week, but will take place at the Stork Hotel, Queen Square, on Thursday next, at 7.30 P.M. for 8 prompt. The committee in their circular state that this re-union is usually of a most enthusiastic and enjoyable description, and efforts are being put forward to make this one even more successful than the preceding ones. It is hoped that a large and thoroughly representative attendance will be present. Mr. John Bain, of 122 Robson Street, who acts as honorary secretary, will supply tickets and all information.

MANCHESTER.

MISTAKING LOTION FOR MEDICINE.—Last week at Newton Heath, near Manchester, a stonemason, aged sixty-five, who had been suffering for some time from an ulcerated leg and bronchitis, for which he had different kinds of medicine, received from his wife a draught of the lotion in mistake for the mixture. The former contained laudanum, and as soon as the mistake was discovered Dr. Pegg was called, and the usual remedies were administered, but without avail, the unfortunate man dying in four hours afterwards.

A NEW RIVAL.—The value of newspapers as chest protectors and coverlets has recently been urged (journalistically) upon the Heathen Chinese, this useful bit of information has been re-transmitted to England. The *Manchester Evening News* sees a chance of pushing its circulation, and confidently recommends its Saturday night edition as an absolute specific against lung complaints, colds in the head, and cold feet. No household should be without it. Have you a cough? Then do not delay, for delays are dangerous, but procure a copy of the Saturday night edition. It is equally efficacious for asthma, sore throat, shortness of breath, and all disorders of the bronchial tubes. It is also a preventive of rheumatism and neuralgia. As an article of wearing apparel it is conducive to economy as well as comfort. Worn under the vest it renders an overcoat superfluous. As a mental solace and general tonic it is incomparable. The correspondent who sends us this cutting asks if the Saturday night edition will not henceforth need to carry a three-halfpenny medicine stamp on every copy.

A CHEMIST'S ACTION FOR DAMAGES.—At the Salford Court of Record, on Friday, March 2, before the Recorder, Mr. William Henry Waterhouse, chemist and druggist, Ashton-under-Lyne, brought an action against Mrs. Heginbottom to recover damages. It appears that Mrs. Heginbottom was tenant of a house belonging to the plaintiff, and in August 1887 she gave notice to quit. She left on August 20, but before doing so she had done her best to leave the house in an untenantable condition by getting the the walls of several of the rooms painted in hideous colours. Plate-glass was taken out of the windows and replaced with common glass, and other damage done. It was contended for the defendant that she had decorated the house at her own expense, and plaintiff would not compensate her when she left. The Recorder said it was very melancholy to see such an ebullition of wanton mischief and spite in a person evidently of education and refinement like the defendant. The jury found a verdict for the defendant, considering that the sum of 5*l.* paid into court by her was sufficient compensation.

THE SOCIETY OF CHEMICAL INDUSTRY.—The March meeting of the members of the Manchester section was held at the Victoria Hotel on Tuesday evening. Dr. Schunck presided, and there was a fair attendance. Mr. Rowland Williams read a paper on "Methods for the Estimation of Free Sulphuric Acid in Alum Cake and Sulphate of Alumina." The reader observed that several methods had been suggested

for the determination of free sulphuric acid in commercial aluminous compounds, chief among which might be mentioned the ferric acetate test, largely employed, he understood, at Messrs. Spence's works, the alkaloid process described in a paper of his which was published in November, 1887, and the process depending upon the extraction of the free acid with strong alcohol. Having had a large experience in the use of all these methods, he gave the preference as regarded accuracy to the alcohol extraction process. Some chemists had objected to that process, on the ground that the alcohol dissolved other ingredients besides the free sulphuric acid, which would be acted upon in the titration with standard soda, and would be calculated as sulphuric acid. Numerous experiments which had been conducted in his laboratory had proved that objection to be without foundation. He had prepared them by adding known quantities of sulphuric acid to sulphate of alumina from which the free acid had previously been removed. In every case the percentage of acid was found to be practically identical with the theoretical amount added. The test was made by placing a weighed quantity of the sample in a stoppered bottle in contact with strong alcohol, and allowing it to digest all night. The alcohol was then filtered off and the residue washed with strong alcohol, and the alcohol titrated with standard soda, using phenol-phthalein as indicator. Some discussion took place at the close of the paper, and a cordial vote of thanks was passed to Mr. Williams.

NOTTINGHAM.

How Doctors regard Poisons.—Fatal Mistake.—Last week the Deputy-Borough Coroner (Mr. A. Browne) held an inquest here regarding the death of John Westby, aged 75. It appeared from the evidence of his widow that he had been ailing with rheumatism, and had got a liniment from Mr. J. H. Rodgers, L.R.C.P. & S.E. This bottle after being used was placed beside another bottle containing medicine for internal use. It was not astonishing, therefore, that Mrs. Westby gave her husband a dose of liniment in error, and she did not know this until deceased remarked that it was different to what he had taken in the morning, and said that his throat was hot. She then looked at the bottle, and found that she had given deceased a dose of the liniment. The bottles were exactly alike, although the liniment was a little darker than the medicine. Mr. Rodgers stated that the liniment was composed of aconite and belladonna. When first called, he spoke to deceased, who said his wife had given him the liniment by mistake. He used the stomach-pump, but he saw no signs of poisoning, and he left him. Later on, however, when he saw him again, deceased was in an unconscious condition, and exhibited symptoms of poisoning by aconite and belladonna. He attributed his death to such poisoning.—The jury returned a verdict of "Accidental death."

ROCHDALE.

Rochdale Chemists' Association.—The inaugural meeting of the above association was held last week at the house of Mr. Wilson, Cheetham Street, when about a dozen of the principal chemists sat down to a capital supper. A committee was chosen to carry on the objects of the association. Mr. Alderman Taylor was in the chair, and the secretary, Mr. J. W. Banford, occupied the vice-chair.

SHEFFIELD.

Lead-poisoning.—On Tuesday evening Mr. A. H. Allen, the borough analyst, delivered a highly interesting lecture on "The Action of the Sheffield Water on Lead, and its probable Cause and Cure." The meeting was held in the Literary and Philosophical Society's rooms, and was a very crowded one. Dr. Dyson presided, and a long discussion followed the lecture.

Local Case in the Law Courts.—In the Queen's Bench Division of the High Court of Justice, on Monday, Mr. Justice Butt heard the evidence in the action brought by George Hendry & Co., coppersmiths, carrying on business at Limehouse, to recover the sum of 95*l.* 6*s.* 6*d.* balance due on certain machinery supplied to the Sheffield Varnish Company (Limited), for the purpose of manufacturing varnis nd aiding ventilation at their works at Sheffield. The en- dants counterclaimed for 100*l.*, the amount of loss and in- venience they had been put to by breach of contract o he part of the plaintiffs. Mr. Justice Butt gave judgme for the defendants with costs.

Outrage on a Chemist.—Mr. Arthur R. Fox, ch ist and druggist, of Snighill, was last week grossly assault by two sporting men, who were brought up for trial befor he Stipendiary on Monday. It appears from the evidenc hat Mr. Fox was walking up Norfolk Street on Wednesday ght (February 29), at about 11 o'clock, and when nea the Elephant Inn some one standing by a cab knocked his ar- holder out of his mouth. One of two men (Thomas ley and Benjamin Lambert) is supposed to have done this Mr. Fox thinks it was Oxley, and to him he addressed few words of warning, and was in the act of stopping to pi up the cigar-holder, when Oxley said, "I will knock som ing else out of your —— mouth," and struck him two or ree times with his fist in the face. Turning to one of th wo men who were in the cab, Oxley then said, "Lend me a ick and I will settle the ——." Mr. Fox heard a voice in t cab say, "I'll have a go at the ——," and immediately La ert got out and hit Mr. Fox with a stick. In trying to p ect himself Mr. Fox received a severe blow on the right ist. He was also hit in the face by another man. He got ide the passage door of the inn, and instead of protectin him the landlord said, "What the —— do you want here? Mr. Fox said, "I have come for protection." The landlord ere- upon said, "Go out and protect yourself, you are big gh to do it," and pushed him out. At that time Mr. Fo was bleeding from the back of his head—from a wound ich went down to the bone. He was also cut about the fa and directly he appeared on the footpath again Oxley struc him in the mouth with his stick, knocking nearly the whole the top row of his teeth out. This practically ended the ck, after which Mr. Fox went to the police office and gave for- mation about the assault. On Monday, after evidence fr the prosecutor, Mr. Harrison, surgeon, Paradise Square, w had attended Mr. Fox, said both his lips were swollen co der- ably and cut. The four front teeth were knocked out. ere was a lacerated wound, about an inch long, on the l k of the head. The right wrist was swollen, and prese d a bruise 2½ inches long. His system had received a great ock, and he would not be thoroughly well for a week or te ays. The case was adjourned until Tuesday, when the wi sses were cross-examined, and others gave evidence. No wi sses were called for the defence. Both prisoners pleaded not lty. They were both committed for trial at the Quarter S ons, and were admitted to bail, themselves in 100*l.* eac two sureties each in 50*l.*

STOCKTON.

Fire.—Shortly before noon on Monday a fire broke t in the warehouse of Mr. R. R. Bainbridge, chemist, High reet. The warehouse, which is situated in the narrow lane own as Ropery Street, contained a stock of oils, pain and chemicals, which was heavier than usual in consequ e of its having just been replenished. At the time of t out- break a number of girls were at work on the upper st and one lad was at work on the ground floor. Immedia y on an alarm being raised all hands made their escape, a in a few minutes the building was in a blaze, and on reach the oil the fire raged with great fury. Every effort was n e by the fire brigade to save the building, but it was con ely gutted. 1,000*l.* worth of stock was destroyed, and th sur- ance policies will cover this only partially.

SCOTLAND.

EDINBURGH.

Trade Changes.—Messrs. Clark & Pinkerton, w esale druggists, Greenside Place, are dissolving partnersh Mr. Pinkerton, who comes out of the firm, is to join w Mr. Adam Gibson, F.C.S., a well-known pharmacist and mber of the Scottish Board of Examiners, in forming a new m of wholesale and manufacturing chemists. They will n start business for a month or two yet. Mr. Andrew Hog Earl- ston, has, we hear, bought Mr. Gibson's business in even

—Mr. S. Brown, Marchmont Terrace, has given up his busine there, and has taken a situation in a drug store in the w ern district. The business in Marchmont Terrace has b purchased by someone whose identity is not disclosed the sign "James Robertson & Co."—The drug business i Union Place, Leith Walk, carried on for many years by th late Mr. Leith, and subsequently by Mr. James Marsh, has now been closed, Mr. Marshall having transferred is energies to one of the now numerous "stores" that a ertise "25 per cent. saving, post free."

Sinc the margin of profit has become so small in commerci dealings, it is satisfactory that so few chemists have succu ed to the operations of over-competition. Even when does go under there is sure to be some one courageous enoug o take up the fragments of his business and endeavour to mal out of them a living. John Stuart Mill has said that a ivilisation advances the margin of profit decreases. The m gin, so far as drugs are concerned, does not appear to offe cope for any further diminution. Is it possible we have r hed the climax pharmaceutically?

AN ERATED WATER BUSINESS IN THE COURT.—At the Court Session, Edinburgh, on March 6, before the Lord Justic Clerk, and Lords Young, Craighill, and Rutherford Clark, dgment was given in the action brought by George Suther nd, aërated water manufacturer, Elgin, against John Ettles, hemist there, for reduction of a contract of sale of an aë ed water business, and for 1,000*l.* damages. The questi was whether the contract of sale of the business with it plant was induced by fraud, and whether reduction of the ontract could be obtained. In June 1886 there appea in a Glasgow newspaper an advertisement setting forth t sale of "an extensive and lucrative business in a desira town in the north of Scotland," with a turnover of about 00*l.* a year. The pursuer applied to the reference, and had a nterview with the defender, the vendor of the business, o June 22, 1886, with the result that, after seeing the factor the pursuer made an offer of 2,500*l.* for the goodwill, plant, d stock-in-trade; and also took a lease of the factory for ter ears from Whitsunday, 1886. The pursuer entered upon p session of the premises on July 2, 1886. It was part o e condition in the advertisement that the defender would, necessary, instruct the purchaser as to the process of ma facture. The money to be paid for the business was partly cash and partly by bills. Of the last bill the pursuer re ested a renewal, but the defender refused to renew the bil and it was after this refusal that the present action of red ion, seeking to set aside the contract, was brought. There s conjoined with the action of reduction a note of suspen n of the charge of 500*l.* contained in the bill. The Lord dinary (Fraser), in a judgment reported in this journa n December 3, 1887, found for the defender on all points ith costs. The pursuer then appealed. Their Lordships, ter hearing counsel, gave judgment. The Lord Ordina 's interlocutor was adhered to, with additional expenses

ELGIN.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—At a meeting of this Association on March 2, Mr. H. Bucha n gave his personal experience of "Six Months at the D g Trade." There was also a short programme of songs, adings, &c.

GLASGOW.

SOCIETY OF CHEMICAL INDUSTRY (Glasgow and Scottish Sectio —The fifth meeting of the section for this session was h in the rooms, 207 Bath Street, Glasgow, on Tuesday, March, at 8 P.M., Mr. J. J. Coleman, F.R.S.E., president, in the ch r. The adjourned discussion took place on Professor Dittm s paper, "On the Chloroplatinate Method of Estimating P ssium, &c.," and Mr. F. J. Rowan, C.E., read a paper on "T Estimation of the Calorific Value of Solid and Liquid Fuel.' The next meeting of the section will be held in Glasgow, Tuesday, April 3, 1888.

EPHEDRINE, an alkaloid extracted from *Ephreda vulgaris* by Pr ssor Nagai, has been found to possess considerable mydri ic power, and will in some cases replace homatropin

FRENCH PHARMACEUTICAL NEWS.

(*From our Paris Correspondent.*)

MARSEILLES SCHOOL OF MEDICINE AND PHARMACY.—At the competition for the assistant-professorship of physics and chemistry, held on February 20, at Montpellier, four candidates presented themselves. M. Berg, a licentiate in physical and mathematical sciences was elected.

SUICIDE BY POISON.—A pharmacist's assistant, named G——, aged 25, poisoned himself a few days since at Vincennes, near Paris, with muriate of morphine. Notwithstanding energetic treatment applied by Dr. Pachot, the dose proved fatal. Despondency and loss of situation caused the suicide. Such an occurrence is common enough perhaps in England, but here poisoning cases are rare. As poisons are difficult to procure, would-be suicides usually resort to other means, more or less ingenious and original.

THE BLISTERING CICADAS OF CHINA.—In 1871 Mr. F. Porter Smith called attention to an insect of the order Cicadina, used in China for blistering purposes. The legs and wings are removed, and the bodies only employed, though generally in combination with the more active *Mylabris cichorii.* MM. Arnaud and Charles Brongniart, having received last summer a quantity of the medicinal insects (they are found in Tonkin), undertook to investigate their value and ascertain whether they contain cantharidin. The result of their efforts was communicated, last Monday, to the Academy of Sciences. They found the blistering effects to be rather weak, although evident, and consisting of redness and upheaving of the skin, with formation of vesicles containing an opalescent liquid. No action on the bladder could be noticed. So much for the therapeutics of the drug. The chemical examination was limited to the exhaustion of the powdered insects with warm chloroform, and the evaporation of the menstruum. Warm chloroform is probably the best solvent of cantharidin. The residue, a thick dark-green oily liquid, lets down crystals of a waxy matter, but as the whole is completely soluble in carbon bisulphide, which does not dissolve cantharidin, MM. Arnaud and Brongniart concluded, no doubt rightly, this principle to be absent from the Chinese bug. Besides, all further efforts to isolate even traces of cantharidine were unavailing. Thus at least one point is clear in their minds. As to the other—namely, What is the blistering principle of the drug?—further investigations are necessary. For the present the suggestion is thrown out that the vesicating effect may be due to some acrid principle like that found in croton and other oils.

THE PARIS SOCIETY OF PHARMACY.

THE meeting of March 7 was favoured with better weather than the preceding one in February, and in consequence, counting the officers, nearly forty members were present. An invitation from the Société pour l'avancement des Sciences to send a delegate to its coming gathering at Oran was accepted, and a representative selected who expects to attend the meeting.

M. Léger exposed the results of further investigations made by Professor Jungfleisch and himself on the "Cinchonine derivatives" (see THE CHEMIST AND DRUGGIST of February 4, page 166). The derived alkaloid, "cinchonigine," the most important of the principles soluble in washed ether, was the special object of their examination. Its separation from the other alkaloids equally soluble in the same menstruum is easily effected, owing to the sparing solubility of its hydrochlorate in water. From this salt the base is extracted, and may be obtained in crystals by evaporation over sulphuric acid, but better still by the spontaneous evaporation of its ethereal solution. Many of its salts were minutely described; they offer no particular interest at present. The alkaloid itself melts at 120° C. with the utmost facility, and can be distilled without decomposition in a partial vacuum.

M. Champigny made a report on a communication by M. Benôit, of Joigny, already alluded to, respecting the preparations of aconitine and digitalin. Such is the potency of the

alkaloids that one-tenth of a milligramme is the strength of which the granules should be made, as poisonings have occurred with doses of one-fourth of a milligramme. The formula proposed is the following :—

Crystallised aconitine or digitalin ..	1 centigramme
Sugar of milk	4 grammes
Gum arabic..	1 „
Glycerine and water, sufficient.	

To make 100 granules.

Several ways have been proposed to evenly divide the active principle; but the best, probably, is to dissolve it in chloroform, a method insuring at the same time the purity of the alkaloid. Much danger arises from the fact that the new crystallised principles are considerably more powerful than the amorphous articles hitherto known under the same name, and physicians continue to prescribe the crystals in substantially the same doses.

M. Bouchardat, while agreeing that physicians should be cautioned in regard to the extreme activity of these substances, incidentally added that physicians should also have their attention called to the dangers of the hypodermic injections now so much abused. Many new substances, scarcely known, are injected rather heedlessly, after they have been tried, by obscure experimenters on frogs and guinea-pigs. Pharmacists will be called upon to prepare such medicines, and it is their duty to caution the physicians against the reckless use of unfamiliar substances of the sort.

The experience of other members agreed with the views already expressed respecting aconitine and digitalin, M. Crinon quoting an instance when he had received a prescription ordering 2 granules of Duquesnel's digitalin of ¼ milligramme to be taken at a dose. He had emphatically advised the patient to take only 1.

M. Planchon spoke of strophanthus seeds, showing fine enlarged drawings of the various sorts, communicated by M. Dauvel. The variety of the seeds in commerce is very great, and frauds appear to follow apace. M. Blondel has called attention to a deceit often practised, it was said, by English houses. The seeds were exhausted with strong alcohol. The fraud is detected through the dull appearance of the drug, and the absence of bitterness. Lately, however, the same gentleman received strophanthus kombe seeds, from England also. They looked very bright and fine, but the absence of bitterness led to a closer examination, which proved the seeds to have been exhausted with *weak* alcohol and mixed with some good seeds. The defrauders—very smart people, evidently—had profited by the caution published by M. Blondel, and changed their menstruum so as to exhaust the drug without injuring its appearance. In the same discussion M. Petit said he had received specimens of Senegambia seeds priced at 250f. a kilo., while another, called Nyanza strophanthus, was offered at 43f.

M. Marty read a communication from M. Domergues, pharmacist-in-chief of the Marseilles civil hospitals, recommending vanillin-phloroglucin as a test for the presence of mineral acids in vinegar. But, while willing to admit the value of the new reagent, most members thought the Paris violet or tropœolin papers, now used for the same purpose, quite satisfactory ; a multiplication of tests would therefore only tend to confusion and disagreements among analysts.

M. Prunier, acting apparently under some official inspiration, said a measure was being prepared to enforce the affixing of some distinctive label an all dangerous substances without exception, and wished to hear the views of the Society on the subject.

M. Crinon thought it would be time enough to act when something definite is presented. Such a measure to be effective, must be accompanied with a table defining the substances considered dangerous. M. Petit and M. Ferrand substantially agreed with this opinion.

M. Delpech was of opinion that the French public are more nervous than the English or the German. The poison label with a skull and cross-bones would never do here ; it would frighten the patients too much. To which another member added that it would be hard to get a sick person here to take any potion that might bear a label advising caution in administering the dose. What would it be if the bottle had a second label with the word dangerous ?

GERMAN PHARMACEUTICAL NEWS.

(*From our Berlin Correspondent.*)

PROFESSORS' WIDOWS.—It is reported that the main-nance of the widows and orphans of our university profe rs is to be taken in hand by the Government. Up to the re-sent there has prevailed in the various "widows' fund of the universities considerable differences. For instanc in Berlin the annual contribution of each professor is ut 9*l.* 10*s.*, which entitles his widow to an annual pensi of 60*l.*, with from 15*l.* to 30*l.* for the orphans in a fami of from one to three children ; while in Kiel the widow rec d only 27*l.*, and the children nothing. Of course, eve he former sum is not munificent for the family of a refine nd cultured man, and therefore any improvement in the cond ns which may arise under the rumoured re-arrangement ill be gladly welcomed.

PRIZE FOR AN AMBULANCE.—At the international on-ference of the Red Cross Ambulance Society at Carl he last year, a donation of 300*l.* was received from the Em ss. This sum is now offered as a prize for the best essay on he most Satisfactory Internal Arrangements for a Trav ng Ambulance, with Particulars of the most Convenient Fi gs therefor." Further particulars would be willingly fur ed by the "Central Committee of the Verein vom R en Kreuz," 73 Wilhelmstrasse, Berlin.

THE ALLEGED CANCER BACILLUS.—The sensation dis-covery of the cancer bacillus by Scheuerlein will be fa liar to everyone still. Dr. Senger has been conducting a se s of experiments upon the subject, and he recently laid his lts before the "Gesellschaff für Innere Medicin." Accord to him, the bacillus found and investigated by Scheuer n is merely a harmless organism known as the "potato ba us," which is to be detected in soil, and is a common conco ant of putrefactive processes. Dr. Senger, after elabor re-searches, expresses his opinion that cancer is not pr ced by, or necessarily attended by the development of, a ific bacillus, or that at any rate the appliances and culture dia at present employed are not capable of developing it. ther investigators, such as Dr. Israel, senior assistant to Vi ow, Dr. Lassar, and some assistants of Professor Koch ave examined the cultures prepared by Scheuerlein fr his "cancer bacillus," and these have been found to cor t of the micro-organism already named and characterised non-pathogenic.

APOTHEKE LICENCES.—Rumours have been widely rent concerning anticipated changes in the conditions a ting the transfer of chemists' businesses here. As I have eady explained, the right to run a pharmacy is in Germa only obtained by the possession of a Government licence hich is granted free to the fortunate recipient. These nces are unreservedly the property of the holder, and y by him, with all attendant privileges, be sold to any one ding high enough. Their very considerable value is rec ised when it is known that a business sold for 7,000*l.* y be only worth 2,000*l.* so far as the value of the premi and stock are concerned. The remaining 5,000*l.* is pa for a piece of paper, "die Apotheke Concession." Unre icted liberty to open businesses has been advocated by m , but this idea has been generally abandoned on account the difficulties involved in regard to compensation. nt a year ago the Government commenced to stop this ba ining by prohibiting the sale of any new concession be e the expiration of ten years. This condition was specially ected against a practice sometimes followed of selling th ence almost before the ink was dry, without making any tence of using it. It is now suggested that the difficulty ll be met by granting only "non-transferable" licences, t evert to the Government on the retirement or decease f the holder. This would, of course, entail considerable anges in the career of the pharmacist, and there is a gene feel-ing of uncertainty and dread of what may be hidde n the unknown hereafter.

TRAINING NEEDED.—An interesting legal case s in-vestigated a few days ago in this city. A gentleman ntered a dispensary with a request for a pick-me-up with little opium in it. The assistant promptly prepared a dr ht of

"Apo ekerschnaps," to which 15 minims of tinct. opii were added The customer swallowed the dose, but almost immediatel vomited it up again. This unexpected effect, in conjun ion with the production of considerable irritation of the m ous membranes of the mouth and throat, led to a suspic n as to the correct nature of the medicine, and an action as brought against the assistant. Numerous scientific expert were called to give evidence. Ultimately the dispense was acquitted, on the assumption that pharmaceutic schnaps contains too much spirit to be suited for taking neat" by the non-bibulous, to which class, it seems, the pa nt must have belonged.

SAL YLATES.—The salicylates of various bases are now comin more into use. Bismuth, though not so much prescribe s in England, is in some favour as salicylate, and is found eneficial in chronic dyspepsia and diseases of the digest tract generally. Magnesium salicylate is also in use, t ng given in doses of from 1 to 1½ drachm daily. As an ntiseptic dressing, and particularly in combination with s ium chloride, salicylate of mercury is much recommende being applied as a 4-per-cent. solution with the adjunc amed.

T PHARMACY ACTS AMENDMENT BILL.

IN Co ittee of the House of Lords on Tuesday, the Duke of ckingham and Chandos presiding, the Pharmacy Acts Amendment Bill was considered, Clause I. being agreed .

ON CLAUSE II.

The rl of Milltown moved to amend the clause by the additi of the following words:—"It shall be unlawful for a duly ualified keeper of an open shop for retailing, dispensin or compounding poisons, to keep open shop in more places an one unless he shall engage and employ at each branch op a person who would himself be a duly qualified keeper an open shop for retailing, dispensing, or compoundi poisons, and such person is *bonâ fide* occupied in such b ch shop, provided always that each partner in a duly q ified partnership may keep a separate open shop for ret ing, dispensing, or compounding poisons. Every keeper f an open shop for retailing, dispensing, or compoundi poisons acting in contravention of the preceding section hall for every such contravention be liable to a penalty f 5*l*., and the said penalty may be sued for and recove l in the manner provided by the Pharmacy Act, 1852, f the recovery of penalties under that Act."

The ble Earl said: My lords, I ask your lordships' attenti for one moment. It has come to my knowledge since I ked your lordships to read this Bill a second time that it by no means an uncommon practice for chemists and dr gists to open branch shops in various places, not only i the town in which they are living, but in many others, nd to trust their entire management to unqualified assista s. This practice is not only, as it seems to me, a clear e sion of the intention of the legislature, as expressed in the harmacy Act, 1868, but it is a serious danger to the public nd it is no small hardship on qualified men who have g e through a long course of technical instruction to find t r places taken by those who have really no right to or qua cation whatever for it. As to the intention of the legisla e as it is expressed in the Pharmacy Act, no one can enterta a doubt. The first clause expressly provides that no one hall retail poisons who is not registered as a pharmaceu al chemist and druggist; and it has been contended that t provision is complied with so long as the name of the sh keeper is over the door. That, I submit, could not have t n the intention of the framers of the Act; for in that A —specially in regard to the death of a shopowner—provisi is made for his business to be carried on by his success , who must employ a duly-qualified assistant. It is clea the intention of the legislature was not merely that th man whose name was over the shop door should be proper qualified. I am told it is not unusual for well-to-do person o buy up the small shops in a town, and put their own u ualified assistants in them, thus causing serious danger the inhabitants of the town.

Lord hring: I have no wish to oppose the clause; but I am not sure that I understand the effect of the proposal, or the case it is supposed to meet. It seems to me that a chemist who is himself qualified does not always require a qualified assistant.

The Earl of Milltown: I have stated it to be the fact that the law as it stands is constantly evaded by unqualified persons carrying on the business of a chemist. It is held that under the Act as it now stands they cannot be prosecuted. My object is to amend that.

Lord Thring: I should like to know what the meaning of the clause is. As I understand it, the object of the Act is that every one should have a certain qualification who mixes dangerous drugs. Clearly a person who does sell drugs without a proper qualification should be punished. What I want to know is why a chemist, having three or four shops, should not employ any unqualified assistants.

The Earl of Milltown: I am not prepared to say more than I have stated. It has been held under the first section of the Act that it may be possible to prosecute these persons, and my own opinion is in that direction; but it has also been held by others that it is not possible to prosecute them. The fact is a common one, and great complaints have been made about it. I may read to your lordships a paragraph in a letter I have received from a chemist in Lancashire who says:—"There is another point I wish to call your lordship's attention to. A registered druggist can have any number of shops in different towns, and those branches are managed by unqualified assistants. I consider this unfair to registered assistants, and I think it ought to be compulsory that all managing assistants should be registered." That is from a man who knows the fact.

The Earl of Kimberley: I should like to ask the noble earl this question: Is it intended that unqualified persons may compound medicines which are not poisonous? Because it has been represented to me that there are medicines which are not poisonous, but which, if improperly compounded, might have serious effects. I understand the general clause to mean that a chemist shall not carry on business at various places unless he is represented by a qualified assistant.

The Earl of Milltown: I have contented myself with the Act of 1868, which confines itself to the persons compounding poisons, and does not confine the making up of medicines which are not poisonous to qualified assistants.

Lord Thring: I do not see the necessity of the clause, although I do not oppose it. If an unqualified assistant can act in one shop he can in another.

The Earl of Milltown pointed out that the real difficulty arose from the preamble. A further provision could be inserted if the noble lord would move to amend.

Lord Herschell felt sure the noble earl would see that such a difficulty might arise.

The Earl of Milltown undertook to consider the point. Perhaps the preamble might be omitted altogether, as it was absolutely useless. With regard to the words "persons known as chemists and druggists," it might be that assistants in chemists' shops were known as chemists and druggists; as a matter of fact they were such, whether qualified or not. If that were the case he should propose to amend the preamble.

The Lord Chancellor was unable to appreciate the difficulty pointed out by Lord Herschell, and maintained that the law was perfectly intelligible as it stood. The difficulty with which the amendment of his noble friend proposed to deal was that a duly qualified chemist and druggist might have a dozen shops with an assistant in each of them. In a certain sense he was the occupier of them all, and the difficulty suggested was that although he had other shops than the one over which he personally presided, there might be utterly unqualified persons keeping shop for him. What he understood the noble lord to desire was that any infringement of the Act should be avoided by requiring that any person who kept one of these multiplied shops should have as good a qualification as the Act required in the case of the original occupier.

Lord Herschell was not himself sure whether under the existing law a duly-qualified person could open a shop and then go away into the country and leave it in the charge of unqualified persons, with full powers to dispense. If he were able to do so, certainly the existing law needed amendment in that respect.

Viscount Cranbrook called attention to the fact that by the

first section of 31 & 32 Vict. c. 21, it was rendered illegal for any person to keep open a shop for the retailing or dispensing of drugs, or to use the title of chemist and druggist, unless such person was registered under the Act. He presumed the difficulty to which his noble friend referred, and which had arisen, was that under that Act a man who kept a chemist's shop was not required to have a qualified chemist as his assistant. If that were so it was a most extraordinary position. He was surprised if there had been no legal decision on the point. If it were found that in actual practice such things did occur, it might be well to take precautions against their continuance.

Lord Herschell remarked that where a man occupied more than one shop he was required to have one qualified assistant. Perhaps the noble earl would reconsider the question with a view to meeting that case as well, for obviously it was of very little use if a man kept several shops that he should have only one qualified assistant.

The Marquis of Salisbury was understood to ask how the noble lord would define residence on the part of a chemist and druggist. How long must he be in the shop to constitute residence?

Lord Herschell said that, whatever qualification was made necessary, it should not be permitted to an unqualified person to dispense. That was the real provision which one would expect to find for the purpose of securing the public against poisons being improperly dispensed to them.

The Earl of Kimberley thought one remark made by the Earl of Milltown was somewhat peculiar. He stated that an amendment of the law was necessary because in some towns large shops bought up other shops. Apparently the law was not to be amended for the protection of the public, but because the present system was inconvenient for those who had bought up shops.

The Earl of Milltown replied that he was not prepared to undergo cross-examination on this point. (Laughter.) He had only heard of the case to which he had referred during that afternoon. He was not aware of it before. In bringing forward this Bill he was actuated only by a desire to protect the public against the manifest danger arising from the unqualified dispensing of drugs. At the same time he was anxious not to do anything unduly to harass the trade. This amendment was proposed wholly in the public interest. The President of the Pharmaceutical Society had informed him that there was no objection to it on the part of the trade, and he was of opinion that the present law operated extremely unfairly upon qualified assistants, who had gone through a long and expensive course in order to provide themselves with a qualification. From the public point of view, the danger of course was that unqualified men might dispense poisons. If this clause did not go far enough to meet every possible case, he could only suggest to his noble and learned friend that he should bring forward an amendment on the report stage to carry out his views. He should then be most happy to consider it, but he was naturally anxious not to overweight this Bill, and thereby invite considerable opposition from interested parties elsewhere.

The Earl of Kimberley considered that the phrase "*bonâ-fide* occupier of such branch shop" was capable of amendment.

The Earl of Milltown wished, in order to throw a little light upon the subject, to just read the words of the 16th section, which referred to the case of a chemist who died, and whose business was allowed to be carried on by his executors provided his assistant was a qualified person. The words were these: "If and so long only as such business shall be *bonâ fide* conducted by a duly-qualified assistant." Those words were the same as he now proposed.

The Earl of Kimberley: No, they are not the same words. Consider it on report.

The Earl of Milltown: I will consider it on report.

The amendment was agreed to.

The Bill, as amended, was then reported to the House.

ANTIPYRIN is fast gaining a reputation as a panacea. Dr. Adolphe Bloch, of Havre, cures hay fever with 1-gramme doses before breakfast. He believes that the action is of an anæsthetic nature, and in the encephalic nerve being influenced. Dr. Bloch has also found antipyrin useful in nervous drowsiness.

Pharmaceutical Society of Great Brita

COUNCIL MEETING.

THE Council met on Wednesday at 11 A.M., the Presid Mr. Michael Carteighe, in the chair. There were o present the Vice-President (Mr. Gostling), and Messrs. Al Atkins, Baildon, Bottle, Butt, Cross, Greenish, Hamp Hills, Newsholme, Richardson, Robbins, Savage, Scha Southall, and Symes.

The minutes of the last meeting were read, and arising t of them the President intimated that Mrs. de Bary (thr h Professor Flückiger) and Madame Mehu had acknowle d the votes of condolence passed by the Council in regar o them.

ELECTIONS, RESTORATIONS, &C.

After the President had moved that the seal of the So y be attached to the diplomas of those who passed the M r examination last month, he read out the names of those o were desirous of joining the Society, and who were of c e elected without demur. Various persons who had all d their subscriptions to lapse were readmitted on paymen of half a year's subscription.

It was intimated that Mr. George Ramsden, of New t, Salop, had been restored to the register of chemists d druggists.

FINANCIAL REPORTS.

The Secretary read the reports of the Finance Comm e, which dealt with the General Fund and the Benevolent d. The principal items of these reports were referred to b he President in formally moving their adoption. In ng so he said that there was nothing special about the re ts on the General Fund, but he was glad to say that fo he Benevolent Fund there were donations amounting to 11 in addition to subscriptions. The payments included unu lly large bills to the printers of the Journal on account o he special issue; and for apparatus, materials, and spec ns for the examinations there was an expenditure of ut 100*l.*, and further sums of 185*l.* for the fittings for th is-pensing room, and about 120*l.* for bottles and other furni gs required for the new examination hall. 1,000*l.* had en paid to the contractor in respect of fitments, as w as structural work, and in anticipation of the calls upo he General Fund during the ensuing month the Com tee thought it desirable to sell out 2,000*l.* worth of new per cents. in order to meet these.

Mr. Bottle asked what the total expenditure upon th ew buildings had been so far.

The PRESIDENT said 7,400*l.*, including fittings, or 0 0*l.* on the building alone. In reply to Mr. Atkins, he sai hat the new dispensing counter accommodated twelve cand es, and it was the experience of the examiners that the ole arrangements were most satisfactory. Although so far ex-tensive alteration had been carried out, it was antic ted that by another year more time at the dispensing c nter would be given to each candidate. Under the new ar ge-ments the examiners were able to see whether the lips which candidates made were the result of inexperie or temporary excitement.

After some further unimportant comments the repo was adopted.

THE BENEVOLENT FUND.

The committee had considered eight cases, in five of ich they recommended grants of 10*l.* each, in one a grant 5*l.* One case was not entertained, and the considerat of another was deferred until next meeting. The Se ary reported that George Fife, an annuitant, had died si last meeting.

In moving the adoption of the report,

The VICE-PRESIDENT said that the case which h not been entertained was that of Miss Fife, the sister of de-ceased annuitant. It was a very sad case, and Mr. sser, the local secretary, who wrote earnestly and kindly re ding it, had urged that Miss Fife should be considered an orphan of a chemist and druggist. He was sorry say, however, that the regulations would not allow the Co il to authorise a grant, Miss Fife being neither the wi nor orphan of a chemist and druggist. The committee atly

regrett that their hands were tied in the matter, the case being ery deserving one, Miss Fife having been dependent upon l late brother.

Dr. MES said that he was sure that every member felt as wel s he did the great value which the Benevolent Fund was to any people, and he would not have risen to speak were i ot that at the last meeting a grant had been made which e knew to have been of considerable value. He referre to a grant of 15*l.* which the Council had made to the widow f a chemist and druggist in his neighbourhood. They re very respectable people, the husband had died somew t suddenly, leaving his widow with five children. There s considerable sympathy for her, and when it was known cally that a grant of 15*l.* had been given, more was subscr d for her benefit. Well, he had the satisfaction of saying at the 15*l.* would be the means of keeping the family out of e workhouse, and he was sure that if chemists and druggi s generally knew the good that the fund was capable of doi , and did do, subscriptions would come in more liberal (Hear, hear. Mr. ATKINS: Perfectly true.)

The solution was then put and carried.

BRARY, MUSEUM, LABORATORY, AND HOUSE COMMITTEE.

The port of this committee contained references to the reports f the librarian and curator. Professor Dunstan had report upon the work done in the Research Laboratory during he past year. The committee had considered the comm ication from the South Kensington Museum authorities in gard to holding the annual conversazione there, and had c e to the conclusion that the gathering should this year b in the Society's own house. A communication received om the Scottish Education Department in regard to the ce ficates of certain examinations which the department propos to institute had been considered, and it was recommende that the Council should accept in lieu of the Prelimina examination such of the certificates as might be accept by the General Medical Council, provided they includ arithmetic, English, and Latin.

The mmittee also recommended the following regulations for th ompetition for

THE REDWOOD SCHOLARSHIP.

One holarship is offered annually, and will be presented at the mmencement of the session of the Society's school in Oct er.

The holar shall for that session be a pupil in the Society's scho

The cholarship is of the value of 20*l.*, which shall be expende for instruction in the Society's school.

The ayment is made in one or more sums, as the Council may ect.

The ubjects of examination are the same as for the Jacob Bell memorial scholarships. The examinations are held at the sa e time and places, and the award made in the same mann and by the same persons as in the case of the Jacob Bell memorial scholarships.

Ca dates must be registered students or apprentices of the S ety, of not less than 20 or more than 22 years of age on th day on which the examination is held, and have passe not less, or been engaged for not less, than three years in th harmacy of a registered pharmaceutical chemist or chem and druggist.

Th ompetition will be regarded as one with the Jacob Bell emorial scholarship Competition, and the Redwood schol ship will be awarded to the competitor who stands first the list after the Bell scholars or scholar, or who, in the e nt of no Bell scholarship being awarded, shall stand first i the competition. The Redwood scholarship will not be av ded to any competitor who has obtained less than 60 pe ent. of the maximum number of marks.

Th holder of a Redwood scholarship is not eligible to comp e for the Jacob Bell memorial scholarships, and no perso who holds or has held a Jacob Bell memorial scholarship eligible to compete for the Redwood scholarship.

Th first competition to be in July, 1888.

Th ommittee had also recommended that after the next comp ition no candidate should be permitted to compete for the cob Bell memorial scholarships who, on the day of exan ation, is less than 20 or more than 22 years of age.

The PRESIDENT, in moving the adoption of the report, said that it would be necessary to appoint a special conversazione committee, the new regulations of the South Kensington having made it impracticable to have it there. Concerning the Redwood scholarship, he remarked that the committee had to keep within the limits of the trust, and had to consider the matter in relation thereto. There had been considerable discussion in committee as to whether they should have an annual scholarship of 20*l.*, or a biennial one of 40*l.*, but the conclusion arrived at was that it would be best to help as many men as possible, and 20*l.* would be a considerable help towards defraying the expenses of a course of study for the Major examination. It would also be very convenient to work the examination for the scholarship along with the Jacob Bell scholarship competition, and it might appear that some of the paragraphs of the regulations were somewhat stilted, especially as to the number of marks, so that the Redwood scholarship was apparently put on a lower level than the other; but that was not so. There was a certain amount of interest in associating the name of Redwood with Jacob Bell—both had been such great friends—and candidates would feel it an honour to be a Redwood scholar, independent of the money value of the scholarship. As to the change in the age of the candidates for the Bell scholarship, he pointed out that it would not interfere with the maximum, but at present there were many youths who competed while they were quite young, say 19, and who, after completing the year's study at the school, were under the age for the Minor and Major examinations. This was a great hardship to the students. They practically took them away from the practice of pharmacy, and after educating them, the young fellows had to remain *in statu pupillare* for a twelvemonth. The change, it would be seen, was entirely in the interest of the candidates.

Mr. SYMES asked if it was the intention of the Council to give free education to the Redwood scholars, as was the case with the Jacob Bell scholars; and the President having replied that it was not, Mr. Symes said that that put a great difference between the two scholarships. The Jacob Bell was worth over 50*l.*, and the Redwood only 20*l.*

Mr. HAMPSON remarked that the committee had only a certain amount to spend, and in giving it annually it was felt that they would get as many as possible to compete.

Mr. SOUTHALL also thought that it was desirable to give free education with the Redwood scholarship.

Mr. ALLEN said that there was a point which he would like to have the opinion of the Council upon before the regulations were passed. It was to the effect that "the holder of a Redwood scholarship is not eligible for the Jacob Bell memorial scholarships," and so on. It was not likely that a Jacob Bell scholar would compete for the Redwood scholarship, but the opposite was likely. The Jacob Bell scholarship was worth nearer 70*l.* than 60*l.*, and it did seem to him that the man next the Redwood scholar was in a much better position. (No, no.) Yes; he could compete for the Bell scholarship the next year, whereas the third man in the competition had to take the 20*l.* scholarship and become no longer eligible to compete for the more valuable one. He thought this a mistake, and appealed to his fellow-members to consider the matter before deciding upon it.

Mr. SYMES asked if the holder of the scholarship could be considered the holder at the end of the year's study. If not he could enter again for the Jacob Bell competition.

The PRESIDENT remarked that that could not be. It was the intention that anyone who got one scholarship should not be eligible for the other.

Mr. RICHARDSON asked if there was any objection to giving instruction in the laboratory free?

The PRESIDENT, in replying, explained that at the time the Jacob Bell scholarships were founded the Council had full control of the school, and received the fees; and when this arrangement was changed the professors had very loyally continued the custom, the Council paying only for the materials used. In this case also there was special circumstances, Mr. Bell having bequeathed the money to build the laboratory.

Mr. HILLS thought that Mr. Allen's point was worth consideration. Under the new regulation a man could only compete twice; and it was possible that one who obtained the Redwood scholarship might refuse it so as to be able to compete again for the more valuable scholarships.

After some conversation as to the possibility of anyone being able to compete three times, the PRESIDENT said that he did not think it likely that any one who got the Redwood scholarship would give up his chance for the sake of competing a second time. He could not agree that Redwood scholars should be eligible to compete for the Bell scholarships. That would be unfair, for after educating a man for a year they placed him against those who had not had that opportunity.

Mr. SYMES said that it seemed to him that if they debarred the third man in the competition from trying again it would be unfortunate, and he thought it worth considering whether they should not pay the lecture fees or come to an arrangement with the professors. It was a valuable thing for the Society to get these clever lads to educate.

Mr. ATKINS felt that there was a good deal of force in what Mr. Symes had said regarding the payment of fees. The margin between the Bell and Redwood scholarships was certainly larger than at first sight appeared, but he was glad that the committee had decided to make the scholarship an annual one. He differed with the committee, however, upon the question of age, thinking that most young men finished their apprenticeship at nineteen, and it was desirable that they should be eligible to compete before going out as improvers.

The PRESIDENT said that he had little to add on these questions to what had been said in committee. He did not think the Council had been logical when they added free education to the money grant in the case of the Bell scholarship; if that thing were done again it would be better to vote a sum of money at once, and if it were done that way he confessed that it would be good. Granted that the Redwood scholarship was not so high in value as the other, it was nevertheless a considerable honour. Moreover there was a lurking suspicion amongst the members of the Society that if they made these things too good they helped to make scientific men of their students rather than pharmacists. It was a good thing to produce a Tilden occasionally, but their object was to produce good pharmacists.

Mr. SAVAGE was of opinion that it was the best course to make the scholarship an annual one so as to diffuse its advantages.

Mr. SCHACHT was glad that the committee had decided not to add free education to the annual payment. The fund had been raised to do honour to a certain professor, and it would be quite out of place to drag in a free gift of the Society into it. He agreed with Mr. Atkins that the education of the school would be most valuable immediately after pupilage, so that when it was over the young man could start on his wage-earning career with this endorsement. But if he could not enter until a year after his apprenticeship was completed he had a break which might have the effect of deterring him from competing at all.

Mr. NEWSHOLME said that a five years' apprenticeship was quite common in Sheffield, and he thought it was desirable that the apprenticeship should be of that duration, for it was only in the last year that the master got real assistance from the apprentice, and that was also the best time for the latter. Some years ago he had known of a case in which an apprentice had taken a Bell scholarship, but his master would not allow his indentures to be cancelled, and the young man had to forego his chance. Such cases as that were very unlikely to occur under the new regulations.

Mr. CROSS totally disagreed with Mr. Schacht's views regarding apprentices coming direct to the school. He thought it better that they should gain more experience in a second pharmacy, in which case they were more likely to reflect honour on the Society.

Mr. RICHARDSON said that twenty was better than nineteen. Many boys were sent too early to the trade, and he thought that a boy was not sufficiently educated until he was sixteen.

Mr. HAMPSON said the tendency was growing of keeping boys at school longer. Sixteen was now the generally recognised age.

Mr. SOUTHALL had known of two poor boys who had taken the Bell scholarship and completed their year at the "Square" twelve months before they were 21; so that they had to leave the Square and grind up in not the best fashion until they were of age. He did not like that plan, and agreed to the alteration.

Mr. ALLEN was of a similar opinion, and pointed out they had had instances of "Square" students failing in tical dispensing, which was, he believed, due to their having sufficient shop experience.

Mr. BOTTLE moved that the matter be reconsidered the committee, but this was objected to; and after President had again assured the councillors that the ch was entirely in the interest of the students the repor unanimously adopted.

THE CONVERSAZIONE

Again came under consideration, on a motion that it be in the Society's own house on the Tuesday evening t the annual meeting, and that a committee, consisting c President, Vice-President, Messrs. Allen, Butt, Hills Robbins, make the necessary arrangements. The Pres explained that the dinner would be held on the same ev as the annual meeting, at which Mr. Hills asked i members would not require the soothing influence o dinner before the annual meeting. This raised a laugh

Mr. SYMES was delighted at the proposal to hold th versazione in their own house. He had been quite op to going to South Kensington this year. Mr. Atkins exp himself in similar terms, adding that he trusted th committee would try to find room for the ladies. He not like to see them banished.

Mr. HAMPSON proposed that Mr. Atkins as champ the ladies should be put on the committee. (Lau The conversazione would be a blank if the fair sex w present.

This also was Mr. Hills's idea, who suggested eith Atkins or Mr. Hampson, to whom he would gladly give but Mr. Robbins was of opinion that the members committee would sufficiently champion the ladies; same time he thought it was impossible to have ladies conversazione. Mr. Hampson's name was, however, a the committee and the motion was agreed to, as also resolution that the annual meeting should be held on the library, &c, committee being deputed to draw annual report.

BUILDING COMMITTEE.

This committee had had two meetings during the mo which the matters considered were the insurance examination hall and the arrangement of fittings f Ince's practical pharmacy classes. 4,000*l.* was the fi which the structure in Pied Bull Yard had been insu President, replying to Mr. Symes, remarking that he con this sufficient, and so did the Duke of Bedford, who ground landlord. Mr. Carteighe also explained that examination dispensing counter had been utilised Ince's class. In reply to Mr. Richardson he said t 7,400*l.* already spent on the new building did not certain furnishings, such as chairs, which had yet supplied.

Mr. RICHARDSON explained that what he meant w there was a feeling that 10,000*l.* would be spent on th Was that so?

The PRESIDENT: No; we will be as economical sible, and the expenses yet to be incurred are compa small.

The Council went into committee to consider the further, and on resuming the report was passed.

GENERAL PURPOSES COMMITTEE.

Part only of the report of this committee was taken council. It referred to the half-yearly examination classes in the School of Pharmacy, regarding w various teachers had submitted reports.

Botany.

Professor GREEN reported that a large number had co more than half of the students receiving three-fourth full marks. He was highly satisfied with the intelli his students, and recommended the following awards

Bronze medal to R. F. Jennings (92 per cent. mark

Certificates: Alf. Mander (91 per cent.), and E. V (86 per cent.).

Materia Medica.

Mr. HOLMES also spoke well of the twenty candida competed for the bronze medal (the only honour g

this cla, and which was taken by W. A. Salter, with 95 per cent. o narks.

Chemistry and Physics.

Prof or DUNSTAN was not so glowing as the others. Thirtee of his students had tried to answer the elementary questic which he had put to them, and he honestly reported that or three deserved recognition. These were :—

Bron medal: F. Brown (80 per cent. marks).

Cert ates :—A. Mander (76 per cent. marks), W. A. Salter (75 pe ent. marks).

Pharmacy.

As a t-off to the weakness in chemical science Mr. Ince's report practical pharmacy was good. The three at the top of his neteen competing students took 99, 98, and 94 per cent. o marks respectively, and to the best of these, W. A. Salter, e Council awarded a bronze medal.

At t s stage of the proceedings the Council adjourned for lun eon, and on resuming it was intimated that the rest of the port and the report of the Law and Parliamentary Commi ee would be considered in committee. Our representati accordingly withdrew, and was not called back until an hou had elapsed. The President then moved that the report adopted, which was agreed to.

OSTRACISED.

Foll ing on the last motion, Mr. Carteighe said that it was hi luty to move that the name of

Robert Alexander Wright, of Hamilton, N.B.,

should e removed from the Register of Chemists and Druggists. his person, he said, had been placed upon the register abo three years ago on the strength of documents which were u rustworthy—to use a mild expression. In the opinion of the uncil the conduct of Mr. Wright and the want of judgm t on the part of the medical men were open to censur and he would remind them thus publicly, as well as others o might be concerned, that there are provisions in the Ac nder which the Council could prosecute those who make f se declarations.

The atter then dropped.

THE FUTURE CURRICULUM.

The RESIDENT said that in consequence of various statements ich had been made out of doors the Council desired to put record the following resolution :—

It is e intention of the Council that the courses of instruction in any hool—when conducted in accordance with the rules and conions to be laid down from time to time by the Council of the armaceutical Society, and approved by the Privy Council under e provisions of the proposed Bill – shall be recognised as qualifyg courses of instruction under the said rules and conditions.

THE BRANCH SHOP CLAUSE

of the armacy Bill, now before the House of Lords, came up for nsideration on the motion for the adoption of the report the Law and Parliamentary Committee. In reference to it tl President said that as a result of their deliberations that c, the Council viewed the introduction of the new clause ith reference to branch shops as a little unfortunate, and th were in no way responsible for it. In the discussion in the ouse of Lords on the previous night it came out that a com unication had been made to the Lords of the Privy Counc from one, and possibly two, gentlemen in the North, urging at branch shops should be placed under the charge of qua ed men only, and as a consequence Lord Milltown and m bers of the Government had consulted, and, contrary to his Mr. Carteighe's) wishes, had introduced the clause. While gretting that matters other than education were introduc in the Bill, they recognised the fact that a few years ago th had come to the decision that branch shops should be reg ated; and as the clause which had now been introduced as substantially the same as the clause which they had d ted, the only course left for them was to support it as suc But as a question of wise procedure it was open to doubt nd all that they could do was to use every means in their wer to get the Bill through as it now stands.

Res utions in support of the Bill were intimated from the Sl field and Birmingham Chemists' Associations. That of th atter expressed regret that a longer period than 1893 for as tants now in the business is not to be allowed, and, speaking to that, the President said that there was some misconception about. The Bill distinctly said that it would not come into force *before* 1893, and its provisions, so far as the examinations were concerned, were to be the subject of by-laws which the Council would form with due respect to the rights of all individuals.

Mr. SOUTHALL pointed out that the Modified men had had twenty years in which to appear for examination, and the period had not yet expired, whereas present assistants were only to have four years. That seemed to his Birmingham friends to be an unequal arrangement.

The PRESIDENT having intimated that the matter would be considered at the proper time, the matter dropped.

THE EARLY CLOSING BILL.

Mr. HAMPSON had on the agenda-paper a resolution, of which he had given notice, and which was as follows :—

That the Law and Parliamentary Committee be instructed to take the necessary steps to oppose the Early Closing Bill now before Parliament.

He said that this Council, as representing the trade, should take the matter into consideration. The Bill affected a very large number of shopkeepers, and it was of a very objectionable kind of legislation. Everything was being legislated for—they would be told by Act of Parliament what kind of carriage they were to ride in, and it was quite time that such legislation should be stopped. It dwarfed the minds of the citizens of the State to have their matters arranged for them by others, and he would on principle rather consider the Early Closing Bill not as affecting chemists, but as affecting all trades. The promoters of the Bill proposed that chemists and druggists should not keep their shops open after 8 o'clock except for the sale of medical appliances, &c. Now chemists sold many things in addition to drugs, and the question came to be what was a "medical appliance." It might be that a person was sent to a chemist to get a prescription dispensed after 8 o'clock, and was to bring some tea or coffee with him, which were not medical appliances, although many chemists kept them. Would essence of beef be considered a medical appliance? (Several members, "Yes.") Would a tooth-brush be a medical appliance? (A voice, "No, surgical instrument"—laughter); or a bottle of pickles—an excellent stomachic? ("Oh! oh!") He was sorry to make these remarks, but they referred to possible contingencies. Then what was an "open shop"? Was it opening the door, or taking down the shutters? He contended that the purpose of the Bill was to crush the small traders at the expense of the big, and the mode in which the Act would be carried out—viz. by a staff of police inspectors—was most repugnant to his mind. He objected to be watched in this way, and, although he did close earlier than his neighbours, he objected to be compelled to do so. A similar Act had been in force in Australia for some time, but everybody there was calling for its repeal. He hoped that his motion would be adopted.

Mr. ALLEN seconded the motion, at the same time remarking that he thought other trades would look after themselves.

Mr. HILLS also gave the motion his support, as the promoters of the Bill had not listened to their request to have chemists exempted. Moreover, his opinion now was that exemption of chemists meant that they would be placed in the schedule along with tobacconists and that lot, which was not desirable.

Mr. CROSS failed to see what right the Council had to meddle with politics generally. He believed that the Bill was an unnecessary one, but they were there as representatives of the drug trade, and for them only should they speak. He therefore moved as an amendment—

That the Law and Parliamentary Committee be instructed to take the necessary steps to have pharmaceutical chemists and chemists and druggists exempted from the Early Closing Bill now before Parliament.

Mr. BOTTLE seconded and commended this amendment.

Mr. SOUTHALL considered that the Bill was a good one. There was an opinion amongst some people that chemists were always at their beck and call, and it was desirable to disabuse them of this opinion. The Bill was required for the benefit of assistants and apprentices, who in suburban businesses were kept very late.

Mr. ROBBINS said that as a public Bill the Council had nothing to do with it, and he thought that it would be a real benefit to chemists, many of whom in the country still keep up the old-fashioned late hours. So far as Mr. Cross's objection was concerned he thought that the promoters did all they could by allowing chemists to supply urgent cases after 8 o'clock. Seeing that chemists' businesses were so mixed, it would imperil the efficiency of the Act to exempt them from it.

Mr. BAILDON thought it would be a pity to oppose a Bill which affected the trade so slightly. Chemists were traders, they could not get over that, and it was no hardship to enforce by Act of Parliament, what was now the general custom. He objected to Mr. Hampson's remarks as being general. He had spoken of grandmotherly legislation, but had forgotten that many useful statutes, such as the Factory Acts, were the result of that necessary expedient, and he did not think that there were many measures which had been so enacted which Mr. Hampson would care to repeal.

Mr. NEWSHOLME, while agreeing that it would be much better to shut up shops earlier, hoped that chemists would be exempted from the Bill.

Mr. HAMPSON then replied, first expressing his regret that so few of his friends had supported him. He contended that the Bill interfered with the liberty of the individual, and that it would ruin East-end traders, most of whom only begin their day's earnings when the Bill would make them shut up their shops. He argued that if the Bill passed a man would not be able to get a piece of cold meat if he wished it after his day's work; but this opinion was received with dissent. He maintained that the measure was fraught with so great evil that he was compelled to take it up, political though it was.

The PRESIDENT admitted with Mr. Hampson that there were many drug businesses in the East-end of London which would be ruined if the Bill became law. In the suburbs it was quite a common thing for a working-man, after he got home at night, to take his supper and then go out shopping. That would be stopped by the Bill, and the consequence would be that suburban trade would fall into the larger shops in the centre. He maintained that the provision under which chemists would be able to supply things after 8 o'clock would defeat its purpose, for those who had no conscience would make a pretence only of shutting their shops, and would continue to do a roaring trade by a side door, their more conscientious brethren having meanwhile closed up in reality.

After some further conversation, which went to show that the speakers were not intimately acquainted with the provisions of the Bill, Mr. Cross's amendment was put to the meeting with the following result:—

For—Messrs. Baildon, Bottle, Butt, and Cross.

Against—Messrs. Allen, Hampson, Hills, and Schacht.

The President gave his vote in favour of the amendment, which therefore became the substantive motion. Thereupon Mr. Baildon moved as an amendment to leave the matter to the committee, but the motion was not seconded. The members still continued to talk about the matter, Mr. Hampson remarking that the motion was a selfish one, and Mr. Schacht averring that if druggists were exempted, the smaller among them would poach on the grocers' and similar businesses. Ultimately a vote was taken, with the result as follows:—

For—Messrs. Bottle, Butt, and Cross.

Against—Messrs. Allen, Baildon, Hampson, Robbins, Schacht, and Southall.

The motion was therefore lost, and with it an hour's time, resulting in nothing.

THE CONCLUDING BUSINESS

consisted of the report of last month's examinations, and intimation of letters of thanks from the Leicester and Sheffield Chemists' Associations.

IODINE INJECTIONS generally cause considerable pain, when used, *e g*, in cases of hydrocele. To prevent this, Mr. Walter Edmunds, M R.C.S., recommends the injection of 5 grains of cocaine hydrochlorate in 50 minims of water immediately after the fluid has been withdrawn. Although the cocaine reacts with the tincture of iodine to form an insoluble compound, the therapeutic effects of the iodine as a cure for hydrocele are not impaired.

Legal Reports.

THE APOTHECARIES' HALL, DUBLIN, AND MEDICAL DEGREES.

AT Dublin on Saturday Vice-Chancellor Chatterton delivered judgment, at the close of a four days' argument, in the action brought by the King's and Queen's College of Physicians of Ireland against the Apothecaries' Hall and the College of Surgeons, Dublin, for a declaration that the Apothecaries' Hall was not entitled to hold a qualifying examination in respect of medicine, and an injunction restraining that body from entering into a combination with the College of Surgeons to hold a joint qualifying examination for the purpose of granting diplomas to practitioners under the Medical Acts. The contention of the plaintiffs' counsel was that the function of apothecaries was confined to compounding the prescriptions of the physicians; while the apothecaries' counsel argued that from the time of Edward III. they were recognised in statutes and judicial decisions on an equality with physicians and surgeons; also that they were expressly entitled to registration under the Medical Acts of 1858 and 1886, and to direct representation on the General Medical Council, which has the control and direction of medical education as regards both universities and licensing corporations in the United Kingdom. The Vice-Chancellor held that the Apothecaries' Hall was a corporation capable of granting a diploma entitling the holder of it to act as a medical practitioner, and accordingly the Hall was entitled to combine with the College of Surgeons to hold a joint examination. He therefore dismissed the action with costs. It is stated that the College of Physicians will appeal.

PROSECUTION UNDER THE SALE OF FOOD AND DRUGS ACT.—A SPIRIT OF NITROUS ETHER CASE.

AT the Town Hall, Ashton-under-Lyne, on Wednesday, March 7, before Ralph Bates, Esq. (Chairman), and Mr. Mayall, Mr. Allwood Simpson, registered chemist and druggist, of Staleybridge and Hurst Brook, was charged on information laid by Edwin Hewitt, of Hurst, Inspector of Weights and Measures, for having on February 6 at Hurst unlawfully sold, to the prejudice of the said purchaser, a certain drug, to wit, 1 oz. of spirit of nitrous ether, which was not of the nature, substance, and quality of the article demanded by the said purchaser thereof.

Mr. Henry Glaisyer, LL.B. (Messrs. Glaisyer & Porter, solicitors, Birmingham), conducted the defence, instructed by Mr. W. F. Haydon, of Haydon's Chemists' Defence Agency, Birmingham.

Mr. Glaisyer: I appear for the defendant, on whose behalf I plead not guilty. To save time I will also admit the service of the summons.

Inspector Hewitt deposed: On February 6 I went to defendant's shop at Hurst, where I purchased 1 oz. of spirit of nitrous ether. As soon as I had made the purchase I told the young gentleman in charge that I should send it to Dr. Campbell Brown, the county analyst, at Liverpool for analysis. He said: "I know what you want it for." I told him 4*d*. for it. I sealed it up in his presence, and I sent it on February 9 as a registered letter, receipt for which I now put in. On February 27 I received a certificate from Dr. Brown, which is as follows——

Mr. Glaisyer: Perhaps as the county analyst is present he had better put in his own certificate.

Inspector Hewitt: Very good.

Cross-examined by Mr. Glaisyer: Is that all that passed between you and the assistant?—There was some conversation besides.

Were you by yourself?—No; I was accompanied by Police-Constable No. 333, who is here.

Mr. Glaisyer: Then I must ask that he may leave the Court.

Cross-examination continued: Do you say what you have described is all that passed?—No, I cannot say that. There might have been some other conversation.

You did not offer to divide the sample into three parts then?—Yes, I did.

You did not tell us that before, you know. Was that offer accepted?—No.

Did nything take place in respect to the division of the samp?—Yes; he said he could put some more into another bottle Indeed, he did so. He then asked me to seal it, which refused. He then put some wax on it, asked me for my se and sealed it himself.

Is t t the seal (seal handed to witness)?—Yes.

Do ou know the person who served you?—Yes; he stand here (pointing to a person in the court).

Tha s the young man who served you?—Yes.

We he says you asked for one ounce of spirit of nitrous ether -Yes; that is so.

Did ou take your own bottle?—Yes; I did. This is the bottle bottle produced).

The he measured into that bottle you had in your hand a certai quantity of fluid out of a stock bottle?—Yes.

Nov whilst he was pouring the spirit of nitrous ether into the bo le did he say, "I suppose you want this for analysis"? —I d't remember his saying that.

The at what stage of the proceedings did you tell him you nted the preparation for analysis?—Whilst he was puttir it into the bottle.

You ad not paid for it then?—No.

Anc t had not been delivered to you?—No; it had not.

The it was before you had paid for it, and before it had been livered to you, that you stated that you required it for ar ysis?—Yes.

Did e make the remark, "I suppose you want this for analy ," or not?—No, it was in answer to a remark of mine. He sa, "I know what you want it for, and it's all right."

The Chairman: He would know you in your official capac , I suppose?

Wit ss: Oh, yes.

Cro -examination continued: What Albert Hilton, defenda s apprentice, says is, "I measured the ounce of spirit into t inspector's bottle, and I then said, knowing the inspect 'I suppose you want this for analysis,'" and that then u said, "'Yes, and you can take half of that back if you wt it.'" Did you say that? No, I didn't say, "You can ta half that back."

The did the conversation occur after you had paid for it? —I c not say that.

The you cannot say at what stage of the proceedings it was? No.

The you do not know when you paid for it?—I cannot exact say whether it was before or after certain words were oken.

The did the assistant say, "I suppose if I put another ounce into another bottle it will do as well"?—I cannot say.

Yo will not say he didn't make use of those words?—No.

Yo have no recollection of his saying, "I suppose if I put anoth ounce into another bottle it will do as well," and that u replied, "Yes that will do"?—No.

We did he take another bottle?—Yes.

An did he measure into that bottle another quantity of fluid -Yes.

Me ured it from the same bottle from which he measured the fl d that he had previously supplied to you?—Yes, from the s e bottle.

Th was being done whilst you were sealing your own bottl —Yes.

Di Hilton then say, "I will seal this"?—Yes.

An he sealed it in your presence?—Yes.

Us g your seal?—Yes.

W it after this that you paid him the fourpence?—That I car t say.

At paying the fourpence did anything further transpire befo you left the shop?—I cannot recollect. There was some ing said in a light kind of way; I cannot remember parti lars.

Y are quite clear that you told Hilton you were purchas g for the purposes of analysis by the public analyst?—I tol im I intended to send it to Dr. Campbell Brown, who was e county public analyst.

W n did you receive that sample back from Liverpool? —I nnot remember. I sent it on the 9th, and I got it agai by return of post. I believe on the 10th, but I am not rtain.

D Campbell Brown did not retain a sample then: he sent it ba to you?—Yes.

A it has been in your hands ever since?—Yes.

Police-Constable Walter Bennett, who had accompanied the inspector when he made the purchase, was next called, sworn, and examined by Inspector Hewitt.

In answer to questions as to what occurred he said: You said you wanted to purchase 1 oz. of spirit of nitrous ether, and the assistant behind the counter said, "Yes," and he smiled and said he knew what it was for. You said you wanted it for the purpose of being sent to the public analyst, Dr. Campbell Brown, of Liverpool.

After that did I offer to divide it into three portions?—Yes, you did.

Did the person in charge of the shop accept that offer?—No.

Whilst I was sealing up the sample did he say or do anything further?—He said he had some more in the bottle, and he took down the bottle from which he had supplied you, and put some into a smaller bottle and asked you to seal it.

Did I agree to seal it?—No, you refused.

What did the assistant then do?—He asked you to lend him your seal to seal it, which you did. He then sealed it and returned the seal to you.

Did you hear him say anything about the quality of the drug?—He did say something, but I don't recollect exactly what it was.

You remember some conversation taking place with respect to it?—Yes, there was some light remark about it.

Cross-examined by Mr. Glaisyer, witness said several customers were present in the shop when they went, and they had to wait. He thought the inspector did not take his own bottle.

When the inspector asked for the nitre I believe Hilton poured the fluid out of the stock-bottle into a measure and then into the inspector's bottle?—Yes.

Whilst he was pouring the spirit into the little bottle, did he make any remark to the inspector?—What, about the drug?

Did he say anything?—Yes; some light conversation was going on.

Did he say, "I suppose you want this for analysis"?—He said, "I know what you want this for."

Before anything had been said about analysis?—No, after the inspector said he was going to send it to Liverpool to be analysed.

Whilst he was measuring the fluid out of the stock-bottle the inspector told him about the public analyst?—Yes.

Did Hilton say to the inspector, "I suppose you want this for analysis?"—No.

What did he say?—"I know what you want it for."

The Chairman: Were you in uniform or was the inspector in uniform?—No, neither of us.

In further cross-examination witness said, after Hilton put the drug into the bottle and laid it on the counter, several words passed about the analyst.

Were the words used by Inspector Hewitt, "You can take half of that back if you want it"?—Yes.

And did Hilton reply to him, "I suppose if I put another ounce into another bottle it will do as well"?—No.

Did the inspector say, "That will do"?—No. Hilton said he didn't want to separate the sample as he had some of the same spirit in his own large bottle.

Did he ask if that would do as well?—No.

What Hilton says is this:—"I said to the inspector, 'I suppose you want this for analysis.' That the inspector said, 'Yes, and you can take half of this back if you want it.' Hilton then said, 'I suppose if I put another ounce into another bottle that will do as well.' To which the inspector replied, 'Yes, that will do.'" These remarks did not pass in your hearing then?—No.

Witness agreed that Hilton got another bottle down, and put some spirit into it from the stock-bottle from which he had supplied the inspector.

In answer to other questions witness said the inspector said he should have to divide the drug into three parts. Further that Hilton, having put the spirit into his own bottle, asked the inspector to seal it, but he refused. Then he asked for the seal, which the inspector gave him, and he sealed it. The inspector then paid for his purchase.

All the conversation about dividing the sample and sending to the public analyst took place before the paying; the paying was the last thing?—I think he paid for it before he put up his packages.

You are not clear about that then?—No.

Re-examined by Inspector Hewitt: Had I taken charge of the sample at the time I paid for it?—Yes.

Did I remove it from the counter before I paid for it?—Yes; I think so.

Was it on the counter or not?—I think not.

Then had I taken possession of it and removed it from the counter?—Yes.

Then how could it be on the counter? (No answer.)

Mr. Glaisyer: Are the Bench satisfied that the purchase was made according to the Act of Parliament? Section 14 is as follows:—"The person (*a*) purchasing any article with the intention of submitting the same to analysis shall (*b*) after the purchase shall have been completed forthwith notify to the seller, or his agent selling the article, his intention to have the same analysed by the public analyst, and shall offer to divide the article into three parts, to be then and there separated." As far as I have been able to ascertain from the evidence the inspector has not strictly complied with this section—a section framed for the protection of vendors. In the case before you the inspector was not supplied by the defendant himself, but by his apprentice, and I must therefore press upon the notice of the Bench this section, the provisions of which the legislature have thought necessary for the protection of traders. You see that certain formalities must be observed. Certain statements must be made at a certain stage of the proceedings. This is very important, and the matter has been carried so far that I take the liberty of quoting the case of Barnes *v.* Chipp, as showing the exact words of the section with which I am dealing must be used by the inspector. In this case it was held that the notification required to be given by the purchaser under the 14th Section, viz., "that the sample had been purchased for the purpose of having it analysed by the public analyst," using the exact words of the section, is a condition precedent to a prosecution under the Act.

The Chairman: Although there may be some doubt as to the consecutive order of the events that transpired, there can, I think, be no doubt that the inspector did tell the vendor what it was for, or, at all events, that he had a full knowledge.

Mr. Glaisyer: That may be so, but that does not relieve the inspector of his responsibilities under this section. Then, again, the offer to divide the sample must be expressly made *after the completion of the purchase.* See Chappell *v.* Enson, 48 J. P. 200, and several other cases.

Inspector Hewitt: From what is Mr. Glaisyer quoting?—A text-book. The Sale of Food and Drugs Act, with notes and cases.

Inspector Hewitt: I object to text-books. My contention is that the purchase was in my bottle before I told him about the public analyst, although I paid for it afterwards.

The Chairman: You say you told Hilton distinctly that you were sending this to the public analyst?

Inspector Hewitt: Yes; and since the purchase was in my bottle I submit the purchase was completed, although I had not paid for it. That might be a matter of civil debt.

Mr. Glaisyer: The Act distinctly says that after the purchase shall have been completed, the person purchasing any article with the intention of submitting the same to analysis shall do certain things which are clearly and explicitly set forth. This is a penal statute, and the section must be construed strictly. The cases I have quoted are reported cases.

The magistrates conferred.

The Chairman: The Bench is of opinion that the sale was completed except as to payment.

Mr. Glaisyer: If it becomes necessary I hope that the Bench will grant me a case for a superior court. The point I have raised is a most important point, not only to my client but to all retail traders.

Dr. Campbell Brown was the next witness. He was examined by Inspector Hewitt, and, having proved receipt of the sample of spirit of nitrous ether, No. 386, put in his certificate.

Cross-examined by Mr. Glaisyer: Your certificate says:—"That it contains only one-tenth of the full strength, and less than one-sixth of the minimum strength, prescribed by the British Pharmacopœia of 1885."

The British Pharmacopœia does not mention strength, I think?—Yes, at the bottom of page 378 of the British Pharmacopœia, 1885, "Tested as described in the *Pharmaceutical Journal*, 3rd series, vol. xiii. page 63, or vol. xv. page 101, or vol. xv. page 673, it should yield at the ordinary tempera (60° F., 15·5° C.) and pressure (30 inches, or 760 millim of mercury), and when freshly prepared, seven times volume of nitric oxide gas; and even after it has been some time, and the vessel containing it has occasionally opened, it should yield not much less than five time volume of the gas." That is for determining the strengt

The word "strength" does not occur there?—No. witness added, in answer to other questions, that the s answered the other tests of the Pharmacopœia, and he st that the nitrous ether was always leaving the spirit, so a supply from a manufacturer perfect in all respect opened in a druggist's shop, say, twelve times a da three months, would be very much deteriorated.

Cross-examination continued: Are you, Dr. Brown quainted with some experiments made by Mr. Ed Davies, F.C.S., F.I.C., on the question of the giving nitrous ether? The paper was read before the Live Chemists' Association in March, 1886.—I am.

Are these the results which he arrived at? He test for fourteen days. In fourteen days the volume of th diminished by one half?—Yes; but it was improperly

Mr. Glaisyer then quoted extensively from the pap question.

Witness: The proper way to keep the preparation is t it into a number of small bottles.

Mr. Glaisyer: Would any chemist in the ordinary c of his trade do this, Dr. Brown?—He should do.

Experiments have also been made by Messrs. Alle Perry on this question, with which you are also acquai —Yes, and many others.

Then as to the strength. Strength, you say, relates t presence of nitrous ether?—Yes.

Was anything added to the sample you analysed?—

There was no adulterant?—No.

Nothing had been abstracted from the sample?—No

No felonious intent, then?—No, the sample had rioratcd from improper storage.

No fraud by the defendant, then?—It is a fraud o public buying it.

The defendant has not added anything to, or abstr anything from, this drug?—No.

The change that has taken place in the sample is d natural causes?—Yes.

And that only?—Yes.

The Chairman: Then, I suppose, chemists should ke preparation in small bottles, in quantities that they sell, say, in a month?

Mr. Glaisyer: Mr. Davies has said, in the paper to w have referred, that it deteriorates more than one-half than fourteen days, after having been opened three o times a day.

Witness: Chemists do not sell three or four doses a

Mr. Glaisyer: We will take evidence on that point the defendant, if you please.

The Chairman: How much was there in the defen stock-bottle at the time the purchase was made?

Inspector Hewitt: I do not remember exactly, but I think the bottle was about half full.

Mr. Glaisyer: I shall prove that the stock-bottle con only about 3 oz. You would say, Dr. Brown, tha sample that you analysed might have been origina right?—Quite possibly.

And that in consequence of long keeping nitrous eth been given off?—Yes.

Mr. Glaisyer: With regard to the drug in questio Bench will have already ascertained that it contains substances, so that it is impossible for chemists to at its full strength. In addition to that, I shall call you Dr. F. J. Roberts-Dudley, who will tell you that no means admitted on medical authority that the pote the drug is materially affected by the departure nitrous ether. Medical authority by no means dete that the potency of the drug depends on the quan nitrous ether it contains, and on that alone. The defe Mr. Simpson, who has been in business in this distr upwards of fourteen years, is for the first time before a bench of magistrates to-day. On many p occasions he has been visited by the inspector und Act, samples purchased from him have many time analysed by the public analyst, but this is the first o

on whic he has been summoned for an alleged contravention of this tute. The spirit of nitrous ether from which the inspect was supplied was purchased by the defendant from a first-r e wholesale house in Manchester—Messrs. James Woolley Sons & Co.—on December 9, 1886. The public analyst as admitted, in answer to my questions, that no water h been added to the preparation; there has been no admixt or adulteration; nothing has been withdrawn from t preparation, and that the only change that has taken p e has been due to the action of air and of light. I prop to trace this spirit from the time it left the manufa urers' laboratory until the time it reached the inspect s hands. I have here Mr. Husband, the analyst of the Ma hester firm from whom the spirit was bought. He tested at the time the spirit was manufactured, and he will giv you the result of his analysis, which will prove to you th at that time it answered fully to the whole of the tests n tioned in the British Pharmacopœia. Then I shall call th defendant, his assistant, and his apprentice to furthe race the preparation, and show that they added nothin o it, abstracted nothing from it, nor in any sense adulte ed it. It may, however, be scarcely necessary to prove t t, as Dr. Campbell Brown has already admitted that fact. admit that a change has taken place in this preparatic since it left the manufacturer's laboratory—a change in its mposition due solely to natural causes. Notwithstandi which change, however, the medical officer of health will te you it is a good potent drug, and that the defendant is just d in selling it. I ask you, Is the defendant to be held r onsible for this change that has admittedly takeu place? At the time of sale the preparation did not answer quite the tests of the British Pharmacopœia. I have shown u that it answered many of these tests, and that it was c ect as to its specific gravity. Some of the nitrous ether d left it, but as that does not materially alter the potenc of the drug, I must ask you to say that the defendant was j ified in selling this drug in the state in which he sold i There again I am supported by the fact that the Act is t intended to prevent the sale of poor articles, but adulte ted articles, and I could quote from two cases tried in th High Court raising this question. If the Bench are with and decide to dismiss this case they will not be alone their decision, for their brother Bench at Kirkham very r ently dismissed a similar case.

Sup intendent Hewitt: Then a chemist may keep an artic s long as he likes. The British Pharmacopœia is the stand d for drugs.

Ma trates' Clerk: No, it is not the standard fo all medic al preparations.

Alt t Hilton, examined by Mr. Glaisyer, said he was an appre ice under indentures to Mr. Simpson. He was at the Hurs hop on February 6 last when the inspector called there He stated that the inspector called about 6 or 7 in th vening. He asked for 1 oz. of spirit of nitrous ether. He b ught a $1\frac{1}{2}$ or 2 oz. bottle, into which he (witness) meas ed an ounce from the stock-bottle. Whilst pouring it into e bottle witness said, "I suppose you want this for analy s?" He said, "Yes." When witness had put the spirit on t counter before him, the inspector said, "You can take half this back if you want it." In reply to the Bench, witn s said he was sure the inspector said a half, and not a third

M trates' Clerk: The Bench think that if Dr. Roberts-Dud 's evidence might be taken the case might be materia ly shor ned.

D F. Roberts-Dudley, M.R C.S., medical officer of health for t borough of Sta'eybridge, a magistrate, and in active prac e, examined by Mr. Glaisyer: Spirit of nitrous ether, is it new or an old friend of yours?—It would be called swe spirit of nitre if it were the old.

H long have you known spirit of nitrous ether?—Ever sinc t was an authorised preparation.

W at are its constituent parts?—Nitrous ether, aldehyde, and her ethereal and nitrous compounds.

W ich are held in solution by spirit of wine?—Yes.

W have heard of certain tests in the British Pharmacop a. They are, I suppose, proper tests for the freshly prepar article?—Yes.

I it answers those tests it shows that it has been properly pre red?—Yes.

What is the result of keeping this drug?—Nitrous ether gradually diminishes. The medical profession are, however, undecided as to the compounds to which it owes its potency, whether to nitrous ether, aldehyde, or to what.

Nitrous ether goes out of the solution if it is kept?—Yes.

Does this affect or not affect the potency of the drug?—The medical profession are undecided.

Cross-examined by Inspector Hewitt: Is there any other standard recognised by the profession but that of the British Pharmacopœia?—The British Pharmacopœia is our official standard.

Is there any other standard known?—Not that I know of.

Is it within your knowledge that Professor Attfield has given evidence to the effect that spirit of nitrous ether and sweet spirit of nitre are two totally distinct things?—No; I have read the opposite of that.

Do you, then, say spirit of nitrous ether and sweet nitre are the same thing?—No; certainly not; but what has that to do with the present case?

The Chairman: Do you say spirit of aldehyde is volatile?—All the oils and ethereal compounds contained in this preparation are more or less volatile, being merely suspended in spirits of wine.

Do you know that Professor Attfield says these two things are distinct?—Yes; in their mode of preparation, but their medical action is the same.

Then is he right?—I say their action is the same. I am here as a medical witness.

Have you ever had experience of the genuine article prepared according to the British Pharmacopœia?—Yes; certainly.

Do you know of your own knowledge that that article was genuine?—Yes; I bought it from Messrs. James Woolley, Sons & Co., of Manchester.

Mr. Glaisyer: This witness is called to give evidence on the medicinal effect of the preparation when a certain quantity of its nitrous ether has evaporated, and not as a chemical witness. I have here Mr. Husband, who will give evidence as a scientific witness with regard to the process of manufacture and chemical tests, if the Bench think it necessary.

Cross-examination continued: Is this aldehyde more volatile than the other substances?—About the same; they are all volatile.

What's the boiling-point of it?—I cannot tell you that; I have not come to pass an examination in chemistry.

Magistrates' Clerk: What are you driving at, Superintendent Hewitt?

Re-examined by Mr. Glaisyer: You understand the British Pharmacopœia by which chemists are to prepare medical prescriptions; but there are many drugs outside of this, for which it is not the standard?—Yes.

Mr. Glaisyer: I have several other important witnesses present, but I venture to think I have carried my case quite far enough.

The Chairman said that the Bench did not consider that the purchaser had been prejudiced, and the summons would therefore be dismissed. They certainly thought there had been carelessness in keeping, and they would advise the defendant and other chemists to store the preparation only in small quantities, so that this nitrous oxide gas should not escape. Whether the preparation sold had sufficient gas or not they did not think that the purchaser had been prejudiced. There was no admixture and no attempt at cheating in any way.

Superintendent Hewitt: Then I take it that you say that the article sold is of the nature, substance, and quality of the article I demanded?—Yes.

Mr. Glaisyer applied for costs, which were refused, on the grounds that there had been carelessness in the storage of the drug.

Superintendent Hewitt: The public analyst has been called by the other side. They should pay his costs.

Mr. Glaisyer: Oh, no. By the Act of Parliament we should have been obliged to have accepted his certificate, unless we had required that he should be called as a witness.

The Chairman: Dr. Campbell Brown's costs must be paid by the prosecution.

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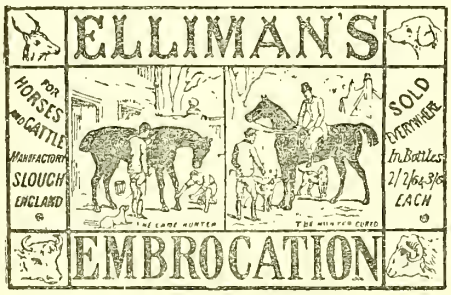

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THE HOUSE OF LORDS AND THE PHARMACY BILL.

WE complained last week that the Upper House of the Legislature displayed an almost culpable indifference to a Bill, affecting pharmacy which came under their notice, and which they adopted in principle without any discussion whatever. Our criticism of their proceedings this week would have to take a somewhat different direction if we thought criticism necessary. When on Tuesday the House went into committee on the Bill, its sponsor, Lord Milltown himself, proposed the insertion among its provisions of the following new clause:—

"It all be unlawful for a duly-qualified keeper of an open sh for retailing, dispensing, or compounding poisons to keep pen shop in more places than one unless he shall engage d employ at each branch shop a person who would himself e a duly-qualified keeper of an open shop for retailing, dis nsing, or compounding poisons, and such person is *bonâ fi* occupied in such branch shop; provided always that ea partner in a duly-qualified partnership may keep a separat pen shop for retailing, dispensing, or compounding poisons Every keeper of an open shop for retailing, dispensin or compounding poisons acting in contravention of the pre ding section shall for every such contravention be liable t pay a penalty of 5*l*, and the said penalty may be sued fo and recovered in the manner provided for by the Pharm y Act, 1852, for the recovery of penalties under that Act."

It wi be seen from our full report of the discussion that Lord M town himself was somewhat hazy as to the purpose and me ing of the clause which he suggested. The text of it he h taken from the draft Bill submitted by the Pharmaceut al Council to the Privy Council in 1883, though he had le out the words "medical prescriptions, or," which occurr in the draft three times preceding the word "poiso." Lord Milltown, it appears, had only a few hours before ard of the anomalous state of things which he proposed remedy, the information having come to him from a corresp dent in Lancashire. This incident throws a side light o to the way in which our legislation is managed for us. B it is not necessary to pursue that subject now. The additi of the new clause and the evident tone of the other peers o took part in the discussion are considerations of much portance. The amendment, indeed, is a much more serious fair than the measure to which it is tacked. It is the first a mpt on the part of the Legislature to make the Pharm y Act of 1868 really operative.

No e, we imagine, can dispute the reasonableness of the, intent of the new clause. The Pharmaceutical Council it app s, are not quite pleased with its introduction; bu their ections, we gather, are founded merely on tactical groun and to these we are not inclined to attach much impor ce. To pass the curriculum is not an object for which e can get up any great enthusiasm. But a considerable s in advance will be taken if we can establish the princi e of a qualified manager to every shop, which was no doubt e idea of the Legislature in framing the 1868 Act, but w ch has been so shamefully outraged since.

The lause, as it is worded, is simply hopeless. It makes no at mpt to define a branch shop, and in that respect merel invites litigation. What, too, is a "duly-qualified partn ship"? Why not "each duly-qualified partner"?

The harmaceutical Council cannot object to the principle of th lause, for it is what they have themselves proposed to the P vy Council. They were urged when they went to Parli ent to include in their Bill those provisions which are essen l if the Pharmacy Act is ever to stand upright. This they clined to do, professing that their plan was to work throu Parliament one idea at a time. The opportunity to do m e is now thrust upon them. It is evident that among certa peers there would be no little sympathy with a motion for a eally effective Pharmacy Act. Lord Kimberley, for exam e, does not often want poisons, but he wants to be sure hen he goes to a chemist to have a prescription dispens that he will have the work done by a qualified man, and t by some one who will ignorantly put a poisonous drug to his mixture. The two greatest legal luminaries of the l d would probably be surprised if they were told of the mise ble skeleton to which gentlemen of their profession have anaged to reduce the Pharmacy Act by their clever com ny quibble. The moment seems opportune, and the Pha aceutical Council ought to strike while the iron is hot. By some activity and some statesmanship they may now secure an expression of opinion from the House of Lords which would be of substantial service to pharmacy, and it is not by any means impossible that with united and vigorous action a really useful measure might be passed through both Houses before next August.

THE PHARMACEUTICAL COUNCIL.

WEDNESDAY'S meeting was unusually dull. Members seemed to consider that their hopes of the enactment of the Pharmacy Acts Amendment Bill had been extinguished by the precipitate action of the noble lord who has charge of the measure in introducing a foreign element into it. Education is one thing—*the* one thing, say the Council; the protection of the public another, and they should not be mixed up. Having already commented fully on this matter, it is only mentioned here as the most interesting topic of conversation on Wednesday.

There were few matters of importance on the agenda-paper, except, perhaps, the extraordinary motion by Mr. Hampson that the Council should oppose Sir John Lubbock's Early Closing Bill. Last year the Council resolved to try to get the drug trade exempted from the provisions of the Bill then before the House. In doing so they acted in opposition to the ascertained opinion of the trade. But to oppose the present Bill on the wider grounds advanced by Mr. Hampson is a much more serious matter. The Council cannot afford to play at politics so lavishly while the drug trade is groaning under grievances which it looks to the Council to remove, and nothing will be lost by the defeat of Mr. Hampson's motion. It will be noticed, however, that it was defeated by a motion on the lines of the action of the Council in this matter last year. This motion by Mr. Cross would have been carried had Mr. Hampson and his seconder concentrated their benevolence on the drug trade instead of the little shopkeepers of all classes in the East-end of London. Only two-thirds of the members present at the meeting stayed to take part in the discussion, thus showing their want of sympathy with the motion. Or it may be that they were wearied by the long discussion which took place in committee on certain legal matters, which it was considered desirable should not be reported. As part result of the deliberation, the name of a chemist and druggist in Scotland, which had been placed on the register by making an "untrustworthy" declaration that he was in business before 1868, was ordered to be removed therefrom. This is a very unusual step; it means that the declaration was false, and that persons are placed on the register too easily. It is generally understood that the Act does not authorise the registrar to make inquiry as to the correctness of the evidence submitted to him, but, strange to say, it gives him power to use his discretion as to whether he will register a person or not. Apparently this discretion has only been exercised in the direction of registration, otherwise we should hear of appeals to the Council. If a system of inquiry existed such disagreeable measures as have been adopted in the case of the Scotch chemist would not be required. It is late in the day to urge inquiring before "the proper evidence" is accepted by the registrar; but as a few names are still added annually to the register in this manner, inquiry wo uld be the less troublesome and all the more necessary. The erasure which has now been made, as the result of documentary evidence placed before the Council, creates a feeling that there may be many more names on the register which in honesty should not be there.

The resolution to make the Redwood scholarship a third prize in the Jacob Bell Memorial competition does not seem

quite in accordance with the fitness of things. It was expected that the income from the fund would be devoted to the assistance of superior pupils in investigating subjects in practical pharmacy—that being the department in which Dr. Redwood has peculiarly excelled. There is the objection, however, that if such a course were taken the benefits of the fund would be restricted to the students of Bloomsbury Square, whereas the course adopted will enable youths all over the country to compete for the scholarship. The minimum limit which has been placed on the age of the candidates for these scholarships is a step in the right direction.

The only other matter of importance which was made public had reference to the new building. 7,400*l.* have so far been spent upon it, 6,500*l.* being upon the structure. The work is not finished, but the President does not expect that the figure 10,000*l.*, which has been stated as the probable cost, will be reached. Nevertheless another 2,000*l.* worth of stock is to be sold this month to meet the demands on the Society's exchequer. There have been several such sales since last May, when the President intimated that the cost of the new premises would be about 6,000*l.* As a result of this it is not expected that the plan of rebuilding the front premises will be proceeded with until the members of the Society in meeting assembled agree to voluntary bankruptcy. Economy in the future is essential, and a beginning is to be made on the evening before the annual meeting, when, instead of some thousands of ladies and gentlemen mooning in the classic halls of South Kensington at the Society's expense, a smaller number of gentlemen will enjoy each other's company in the Society's own premises at Bloomsbury Square—and this will be the conversazione.

UTILISATION OF ALKALI WASTE.

THE remarkable gathering of scientific men at the Chemical Society's rooms on Monday night was a striking testimony of the interest which waste material may engender. There were chemists there from all parts of the kingdom, and professors of chemistry were content with standing room in order to hear what Mr. Chance had to say regarding the recovery of sulphur from alkali waste. It had been known for some time that Mr. Chance had successfully attacked the problem; he had done so before, and so have other chemists, in a limited sense. The problem arises from the most profligate waste which occurs in any industry; not only is it a case of waste of valuable material, but the material gives rise to as great a nuisance as can be conceived, so that a successful attack of this chemical citadel means a large capture of loot as well as the removal of an immense unsanitary heap of refuse wherever the Leblanc process of manufacturing soda is carried out. Alkali waste is the first useless by-product in the manufacture of soda. After common salt is converted into sodium sulphate, and this sulphate is "balled" in a furnace with lime and coal, the chief ingredients of the product are sodium carbonate and calcium sulphide. The sodium salt is carefully washed out, and there remains an insoluble calcareous residue, containing all the sulphur which has been used as sulphuric acid. This residue is alkali "vat waste," and it has been collected in enormous heaps wherever there are alkali works; for every ton of soda produced there is one and a half ton of this waste. Various methods have been proposed to utilise the substance. Mond and Mactear, for example, proposed to treat it with hydrochloric acid, whereby sulphuretted hydrogen is evolved; part of this being burnt forms sulphurous acid, one molecule of which is made to react with more sulphuretted hydrogen to form sulphur and water. A very similar me was proposed by Schaffner and Helbig, but they freed sulphuretted hydrogen by acting on the calcium sulp with magnesium chloride thus:—

$$CaS + MgCl_2 + 2H_2O = H_2S + CaCl_2 + MgH_2O_2.$$

In this case the end reaction was the same as in Mond Mactear's methods, viz.:—

$$2H_2S + SO_2 = 3S + H_2O.$$

In a second operation they recovered the magnesium chl by acting on the mixture of magnesium hydroxide calcium chloride with carbonic acid gas. These proc were more or less a success, as they yielded 50 per cer more of the sulphur in the waste, along with, however, undesirable products such as tetrathionic acid, whicl equation does not cover.

On Schaffner and Helbig's process, the firm of whic Chance is a partner spent 10,000*l.* some years ago in l down plant, and after two years' work therewith they p that sulphur could be recovered as sulphuric acid at a c the alkali-maker equivalent to about 3*d.* per unit of su per ton of Spanish pyrites, as compared with 6*d.* per which was the charge generally made by the pyrites panies for similar work. In consequence of this su the price of pyrites fell to 3*d.* per unit, by the Tharsis con breaking off from their allies, and Messrs. Chance gave recovery process upon which they had spent so much and money. But the plant which they had erected rem and it became a problem, How was this to be ut The process which Mr. Chance had to unfold before h dience is the reply. It is a very simple process—indee Gossage, the pioneer in this department of the alkali in would have been able, as Mr. Chance remarked, to accomplished the same thing in 1837 if he had had as machinery available. In 1861 Mr. Gossage, in a pape to the British Association, said that he was convince "whenever the utilisation of the sulphur in alkali wast be effected, it will be by means of this action of ca acid." In 1883 Mr. Chance was urged by the late Mr. V and others to try the effect of carbonic acid gas upon s of calcium sulphide, but all without effect; and other were from time to time tried, without good result. was no difficulty in getting the lime-kiln gases to dec sulphide of calcium, sulphuretted hydrogen being libe but how to work economically was the difficulty. Ult Mr. Chance observed the process of Mr. C. F. Claus, is in regular use as a means of removing sulphuret drogen from coal-gas. This process depends upon (1) of anhydrous oxide of iron as an absorber of the sulph hydrogen, and (2) decomposing the latter by means of air, thus:—

$$H_2S + O = H_2O + S.$$

The process is performed by mixing sulphuretted hy with a regulated quantity of air, and sending the mi sulphuretted hydrogen and air through a layer of anl oxide of iron, which, by the heat generated by the r itself, is maintained at a dull red heat, the oxide of ir undergoing no change. Free sulphur, accompanied by of water, passes off, the free sulphur being obtained fused or sublimed form, according to the temperatur kiln and of the depositing chambers.

The Claus kiln, used in the process, consists of a kiln lined with fire-brick, and with a perforated which contains a layer of oxide of iron with one of fire-brick below it. Through this the regulated mi sulphuretted hydrogen and air is made to pass. The takes place at once, and the water and sulphur vap

into a sma chamber, where part of the sulphur is condensed and run o in the liquid state, but the greater part passes on to a large ıbliming-chamber, where it is deposited as flowers of sulphu The water vapour condenses at the furthest part of the ch ber. The success of the process depends upon the regulatior f the supply of air: if too much is admitted there is a loss o ulphur as sulphurous acid; and if too little, some sulphuret d hydrogen would be undecomposed. But the primary c dition of success is to obtain lime-kiln gases containing a onstant a percentage of carbonic acid as possible. The gas fm a well-worked lime-kiln contains on an average 30 per ce of carbonic acid and 70 per cent. of nitrogen. The diffic y of separating the latter from the resulting sulphuretted ydrogen prevented Gossage using the gas for the direct m ufacture of sulphuric acid. Mr. Chance has succeeded i getting a gas containing a larger amount of sulphuretted ydrogen than was ever before possible. In his process t mixture of alkali waste and water in the form of a thin eam is introduced into a series of vessels, connected by pipes nd furnished with inlet and outlet ways, and through me or all of these vessels lime-kiln gases are pumped. The carbonic acid of the gas is absorbed by any free lime resent with production of carbonate of lime, and by the s hide of calcium with production, in the presence of water, of rbonate of lime and sulphuretted hydrogen. The latter is iven forward, and passes into another vessel, where it meets th a further quantity of alkali waste and is absorbed w n production of sulphydrate of calcium ($Ca\ H_2S_2$), so that t gas issuing from the last vessel contains neither carbonic id nor sulphuretted hydrogen, or merely traces thereof, d are allowed to escape after passing through a purifier, e gas being chiefly nitrogen. The vessels are worked series, so that when six of them are put on at a time, ni gen is the gas which is evolved; this goes on for a lit over an hour, when the workman finds that one vessel b ns to give off a large proportion of sulphuretted hydroge showing that the carbonic acid is acting upon the calcium lphydrate, thus:—

$$CO_2 + CaH_2S_2 + H_2O = CaCO_3 + 2H_2S.$$

When is stage of the reaction is reached it is found that the con ts of two of the vessels have been completely desulphur d, and during two or three hours following the remaini vessels give up their sulphur as sulphuretted hydroge the gas containing about 30 per cent. of that compound a l 70 per cent. of diluent gases, chiefly nitrogen. This is at o stored in a gasometer, to be used when required for man acturing sulphur, as above described, or for making sulphur acid. For the latter purpose the sulphuretted hydrog is simply burnt in the ordinary sulphuric acid chamb just as pyrites is at present. Hitherto there has been a fficulty in doing this, owing to the gas being too poor in lphur, and chemists have attempted to hit upon a process hich would give a constant supply of the gas, but Mr. C nce's method gives, as Mr. Fletcher pointed out, an int mittent supply, which is converted into a constant c by storage. The best proof of the process s that 90 per cent. of sulphur is recovered, the firm make tons of acid per week by it, and they have already treate o less than 3,000 tons of vat waste. The vitriol obtained exceedingly pure, and the sulphur, both "flowers" and b stone, is of excellent quality. The samples which we ha received are excellently fitted for pharmaceutical purpo , the flowers being devoid of the dull hue which chara rised that made by Mactear's method. We may also add t the carbonate of lime formed during the first stage of the rocess is likely to be utilised as a cement, so that the amou of waste will be brought down to an extremely low minimum, and the total cost of recovering the sulphur will, according to Mr. Brock, be something less than 1*d.* per unit. The support from other manufacturers, which Mr. Chance was promised at the meeting, is the best indication of the success of his process, and it may be said that the problem which has been a nightmare to alkali-makers so long is at last solved. Strange to say, however, the late Mr. Walter Weldon, whose name was frequently mentioned at the meeting in tones of reverence and respect, had little hope for such a process. Speaking in 1883 of Opl's process, which is substantially the same as Mr. Chance's so far as acting on the vat waste with carbonic acid is concerned, he said:—"This proposal seems to me defective, for the reason among others that I do not see how it would be practicable to avoid sending in an excess of CO_2 into the second quantity of mixture of waste and water, which excess of CO_2 would react on some of the calcium sulphydrate . . . driving off H_2S, and so occasioning both loss of sulphur and nuisance." Yet Mr. Chance has just seized upon what Mr. Weldon considered the weakness of Opl's method, and has carried it out to a practical success.

GODFREY'S CORDIAL.

Mr. Haydon, of Birmingham, has had an interview with the authorities at Somerset House in reference to the stamping of Godfrey's Cordial. As we mentioned last week a penalty had been asked for from one of the clients of Haydon's Defence Agency for having sold a preparation labelled as below, with the name and address of the vendors added:—

> Godfrey's Cordial.
>
> For a child 1 month old ... four or five drops.
> „ „ 2 months old ... seven drops.
> „ „ 3 „ ... ten „
> „ „ 6 „ ... twenty „
> „ „ 12 „ ... half a teaspoonful.
>
> And so on in proportion according to age.
>
> In proper doses this preparation is quite harmless, but if used without care it might prove injurious; therefore, in conformity with the Pharmacy Act of 1868, it must be labelled Poison.

The liability to medicine-stamp duty is incurred, quite apart from any question of proprietary right, on the ground that "Godfrey's Cordial" is specifically named in the Act as subject to the duty. Of course the use of a slip label of the article renders even a pennyworth of it sold liable to a threehalfpenny stamp. Mr. Haydon has represented to the authorities the hardship of the demand that an article so universally sold in small quantities should be stamped. The Board decline, however, to withdraw their claim, which, indeed, they would have no power to do, as it does not lie with them to repeal any part of an Act of Parliament; but in consequence of Mr. Haydon's representations they have consented to regard as non liable the above label if headed,

Cordial (Godfrey)

or

Infant's Cordial (Godfrey),

instead of its old title, "Godfrey's Cordial."

The Drug Trade in Ceylon. Business is gradually looking up again in Ceylon, after having suffered most severely from the low prices of produce and other causes of depression for several years. The German consul at Colombo, while mentioning that the direct business relations between Germany and Ceylon, although still insignificant, have assumed larger proportions since the inclusion

of Colombo among the ports of call of the German Lloyd steamers, warns his countrymen not to enter into direct business relations with the natives, but to employ the intermediary of a European firm in England or Ceylon. During the year 1886 Ceylon imported 163,138 Rs. worth of medicinal preparations, of which 95,592 Rs. were contributed by England, 53,158 Rs. by British India, 8,462 Rs. by Singapore, 2,320 Rs. by Austria, and 1,804 Rs. by France. The perfumery imports reached 49,284 Rs., of which 30,571 Rs. were from England, and the remainder from British India and Singapore, with a small contribution from France. Dyestuffs amounted to 65,727 Rs., nearly all from England; soap, 80,639 Rs., of which one-half was from British India, and the rest from England, with a small direct import from Germany. The 1,376 Rs. worth of surgical instruments imported in 1886 all came from England; but, no doubt, a fairly large proportion of these, as of other, goods was of German manufacture. One result of the establishment of direct steamship communication between Ceylon and Germany will probably be that in future the share of the latter country in the Ceylon trade will become more precisely defined.

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Annatto Cultivation in Guadeloupe. Annatto thrives best in Gaudeloupe at an altitude not exceeding 400 metres. Holes, having a diameter of fifty or sixty centimetres and thirty or forty centimetres in depth, are dug at a distance of three to four metres, and in each of these a few seeds are laid. When the young shoots appear, one of the strongest is left to grow and all the others are pulled up. The young plants require a careful hoeing around them for nearly a year on the whole extent of the plantation. In nurseries the seeds are sown in well-prepared beds, and at a distance of about thirty centimetres between each row, and when the young plants have attained a height of about forty to sixty centimetres they are placed singly in each hole. The plant grows very fast, requiring little care after the plantation has attained a certain size. It blossoms one year after being transplanted, and bears a few pods, but is far from having reached its full size, which may be four to five metres. In a rich soil the trees will shade the whole ground in four or five years. The ground is hoed at least two or three times a year, until the trees have attained their full size. Annatto flowers twice a year, the spring blossoms always yielding the largest crop. As soon as the pods in the bunches commence drying and opening, the bunches are cut, packed in baskets, and transported to the shed prepared for the purpose. Every pod must then be picked with the hands, the seeds attached to the white film inside being as much as possible left untouched. The empty pods are used as manure. The picking in Guadeloupe is generally performed by women and children, who are paid at the rate of about five centimes per kilogramme. The crop is gathered from July 15 until the end of August, and it is estimated that one hectare (2·47 acres) of annatto yields on an average 1,500 kilogrammes of green seed for the two crops, or about seven casks of pulp, weighing from 350 to 400 lbs. each.

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Another American Opinion. Dr. F. Trinder, who writes from London, is responsible for the following opinions, which he incorporates in a London letter to *The Western Druggist*:—"At present there are no schools of pharmacy [here] like those of America. An apprenticeship and rigid final examinations at Apothecaries' Hall take their place. There are fewer stores here in proportion to the population, which arises doubtless from the fact that the English druggist sells no soda nor tobacco nor the other American sundries; his trade is strictly medicinal. The drug trade has been almost the last one to be affected by the wholesale reduction of prices caused by the 'Co-operative Stores.' Quite recently a few large retail dry-goods stores have taken to cutting on 'patents,' but, owing to strictly enforced pharmacy laws, they will never be able to injure the prescription trade. American patents, lately introduced here, are not selling as largely as they would were they better adapted in price to a country where money has a greater purchasing power than in the States. An enterprising American druggist who would open and run a store on the American plan would find more than one c ing in this country." For the benefit of those who do know better we may say that the foregoing statements generally incorrect. We have plenty of schools of pharm the Apothecaries' Hall has nothing to do with the Pharm Act, trade is as mixed as possible (although cigars and knows" are not included in high-class pharmacies), pres tions are cut to the bone because our pharmacy laws do protect this field. Several of the most extensively patent medicines are of American origin, and any e prising American druggist who wishes to take Dr. Trin advice should first reflect that he must be registered ac ing to the Pharmacy Acts before he can open a shop fo sale of poisons, or before he can call himself an "Ame Druggist" here.

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Water for Brussels. During the last International Pharmaceu Congress it was evident to the least atte observer that our Belgian brethren had, speak, potable water on the brain. The tion seems to have lost none of its interest for them, as French papers announce that the King of the Belgian offered a prize of 1,000*l.* for the best work on the way of curing a cheap and abundant supply of potable wat large cities in general and Brussels in particular. The is to be awarded in 1893, and foreigners will be admitte compete. All memoirs, printed or written, must be b January 1 of the year mentioned in the hands of the Mi of Agriculture, Industry, and Public Works, at Brussels. works may be written in either of the following langu French, Flemish, English, German, Italian, or Spanish, the prize memoir shall be published within a year afte competition.

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Tannin Wool. In treating ozæna and other diseases atte with fœtid odours, Dr. B. W. Richardson found tannin wool of great service. To make tannin w gives the following directions:—Add to distilled water h to 140° Fahr. pure tannin up to saturation, stirring care all the time. When the water is saturated, add to it cotton wool, bit by bit, until all the solution is taken u the wool. Lastly, put the saturated wool in an evapor dish, and dry it slowly until it is quite dry. It is ready for use, but must always be kept in a closed b It must be neatly teased out before being used; but it is to keep it in the rough state. A good stock of tannin is at all times a useful thing to keep at hand. It is a styptic, and possesses good antiseptic properties. I easily be iodised by making an ethereal solution of io saturating a portion of the cotton with the solution allowing the ether to evaporate. One grain of iodine ounce of the cotton is sufficient to make a very good men; and an iodised cotton made in this proportion i of the best applications for bed-sores that can be adopte rarely irritates, it removes odour, and often favours healing of the sore.

Obituary.

CALDER.—On February 10, Mr. James Calder, chemis druggist, Fyfe Place, Forres, N.B. Aged 27.

FOGG.—On March 2, 1888, Mr. Robert Fogg, chemist druggist, Wigan Lane, Wigan. Aged 40.

GREENING.—On February 3, Mr. William Gree chemist and druggist, Kingsdown, Bristol. Aged 54.

HARRISON.—On February 27, Mr. Joseph Harrison, ch and druggist, Central Beach. Aged 68.

HAYTER.—On February 14, Mr. Herbert Hayter, ch and druggist, High Street, Wimborne Minster, D Aged 67.

PHILLIPS.—On February 27, William Percy Phillips, son of Jonathan Phillips, pharmaceutical chemist, W Aged 13.

WAILE.—On February 19, Mr. John Henry Waile, ch and druggist, Garforth, near Leeds. Aged 51.

MR. BLANK'S ADVERTISEMENT.

We d not expect that our offer of a guinea prize would e act the real sphinx secret of this end of the nineteenth c tury, which we take to be the problem of successful advertis g. We all know stories of the wonderful results achieve by advertising, and we can see if we like to look into the bject that these results are attained by advertisements o every kind and degree of skill. If we look further we shal nd that advertisements of apparently similar kinds and deg es of cleverness are just as complete failures as the others e successes. And this is sure to be the case, and, indeed, ight to be the case. If there were not some unknown nantity in the calculation—if we were all quite certain hat the expenditure of a thousand pounds in a certain ind of advertising would infallibly bring twelve hundre pounds back—we should all get our living straightway in hat very simple manner, and we know not who would l the ground, keep shops, make shoes, or do the necessa penny-a-lining.

We t ught, however, it would be interesting to see what ideas o large circle of post-card competitors could give us on this opic, and here in response we have a large pile of several ndreds of post-cards, embodying either the results of exp ence, or, perhaps more frequently, the suggestions of inna genius. Our suggestion was for an advertisement to occu two inches of an ordinary newspaper, and we left it to co petitors to decide whether to advertise generally or specific y. In the following selection from our post-cards we sha print the proposed advertisements as closely as possibl n order to give as great variety as space will allow; but in l cases where type will admit, we shall follow our corresp dents' ideas as regards display. First, perhaps, room s uld be made for the poets, who recommend Mr. Blank t warble as follows:—

Pills and potions, draughts and lotions,
Rarest drugs from o'er the oceans,
Mr. Blank is now supplying
To restore the sick and dying;
Paste to make your teeth so pearly,
Creams for tresses straight or curly,
Perfumes like the breath of flowers
Zephyr-kissed in sylvan bowers.

The ove comes from Cheltenham.

A Y k competitor sends four verses, of which we give half o :—

John Blank he is a citizen
Of credit and renown,
His shop is the attraction
Of North Gate, in Dull Town.

His "red ointment" is most marvellous
For sores on heads or legs;
It removes them all in no time,
Though they be the size of eggs.

A L doner suggests a poem on TRICOMOKRON. Two lines out of ght of this must suffice:—

Tricomokron gives the hair its lovely pristine hue;
Tricomokron makes it soft and silky to the view.

We ave one or two more rhymes sent in, but none of them e up to standard, and we must regretfully dismiss the a ors from the competition.

Sh espeare is again dragged into pharmaceutical service on so of our cards. Mr. A. Jones suggests the following "Sha spearean Drug-Alo-gue":—

PORTIA.—Yon there will get them good and chea P.
URSULA.—We take that hint from yo U.
ROSALINE.—This truth I'm pleased to hea R.
EMILY.—Unlike those stores, he feels responsibl E.

DESDEMONA.—His fame's already noised abroa D.
REGAN.—And will be more than eve R.
URSULA.—That's true as that my name begins with U.
GERTRUDE.—To him henceforth I'm goin G.
SILVIA.—And so say all of n S.

Mr. W. Jones (Wavertree) proposes the following:—

"Throw physic to the dogs; I'll none of it."—SHAKESPEARE.

The Bard of Avon lived in an age when physic was nasty. Had he lived in our town at the present day, and suffered from any ills "that flesh is heir to," the probability i hat he would visit his physician, pay the fee, and get a prescription; then carefully convey that mysterious-looking and important document to

MR. BLANK'S PHARMACY,
2 Romeo Street, Dull Town,

Where *Dispensing* is a *special feature*, and where he could always rely upon the purity of the medicines, the necessary skill and care in compounding them, and prompt attention.

A few competitors aim by their advertisements to persuade readers into a preference for high prices over the more modern tariff. Whether this course is wise or not we must leave chemists to judge after reading the following examples:—

MR. BLANK, chemist and druggist, Dull Town, begs to call attention to the various changes that are taking place at the present time in the system of trading. The old system of honest dealing in best articles only, and the old English policy of "live and let live," are fast being relegated into the limbo of the past, and their places taken by a kind of cut-throat competition, *with its consequent temptation to sell inferior goods.*

Mr. Blank wishes to intimate that he does not intend to adopt the new system, but will continue to sell and dispense only the very best and purest drugs, chemicals, and pharmaceutical preparations that can be produced at a fair and reasonable business profit.

There are some to whom *cheapness* is everything and *quality* not worth consideration; but the majority like to know where they can rely upon the genuiness and purity of the medicines they take, and the integrity and care with which they are prepared and dispensed. To *such* Mr. Blank will always give his most respectful attention and best services, but to others who want *so called cheap*, but *worthless*, rubbish, he most respectfully says—Please pass on!

T. C. E. Osborne, 19 Moss Lane West, Manchester.

And Mr. C. C. Bell recommends the subjoined for a paragraph advertisement:—

THE LATEST MOVE.—When Macbeth asks in the play—

"What rhubarb, senna, or what purgative drug would scour these English hence?"

compelled by the magic of the immortal Bard, we give it up; but if we are asked in plain prose to name the pharmaceutical equivalent of the Archimedean Lever that moves the world, we unhesitatingly answer—"BLANK'S PURGATIVE PILLS." These wonderful little globules will move *anything*, and yet so gently that a child may take them. If you doubt it, we cannot say "taste and try," for they are quite tasteless, but *try* anyway. They are to be had only in boxes at 1*s.* and 2*s.* 6*d.* of any chemist, or from the Sole Proprietor, Mr. Lobelia Blank, pharmacist, 1 High Street, Dull Town. *Experientia docet.*

(*To be continued.*)

POST-CARD COMPETITIONS, 1888.

No. 3.

MEMBERS OF THE PHARMACEUTICAL SOCIETY who it is desired shall serve on the Council of that body in the ensuing year must be nominated on or before March 24, and those nominees willing to offer themselves for election must signify their intention before March 31. We desire, in the first April issue of THE CHEMIST AND DRUGGIST, to furnish these gentlemen with some concise models for their election addresses, and we therefore offer the usual Prize of One Guinea for what shall seem to us to be the most effective address to the trade issued by our friend, "Mr. Blank, pharmaceutical chemist," who we now assume to be a candidate. Our competitors will be able by this means to show what they think needs doing in the pharmaceutical world, and the limits of the post-card, which we insist upon, will compel all to express their ideas concisely. Post-cards in this competition will be received up to March 31 inclusive, but any reaching us after that date will be inadmissible. Subscribers, their employés and families, are qualified to compete.

Gazette.

PARTNERSHIPS DISSOLVED.

BLASSON, G. J., & STABLES, W. W. G., Heckington, Lincolnshire, surgeons and medical practitioners.

GIBSON, HOGG & CO., Burton-on-Trent, chemists and druggists.

HEWETSON'S CEYLON TEA COMPANY, Mark Lane, City, tea merchants.

LAUNDY & CO., Birmingham, accountants.

LEE & HARDCASTLE, Dewsbury, wholesale confectioners, drysalters, &c.

THE EAST RIDING AËRATED WATER COMPANY, Beverley, Yorks; so far as regards J. R. Spencer & W. D. Blackman.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

WOLSTENHOLME, JOHN HANCOCK, Abergele, Denbighshire, surgeon.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

CROOKES, JOSEPH, Dundee, late of Eckington, Derbyshire, chemist and druggist. March 9, St. James's Chambers, Derby. March 21, 34 Lincoln's Inn Fields.

JONES, DAVID KENT, Plasycoed, Deri, Glamorganshire, surgeon. March 14, Official Receiver's office, Merthyr Tydfil. March 21, Court House, Merthyr Tydfil.

ADJUDICATIONS.

WOLSTENHOLME, JOHN HANCOCK, Abergele, Denbighshire, surgeon.

APPLICATIONS FOR DEBTOR'S DISCHARGE.

DENMAN, FRANCIS PHILIP, Burdett Road, Limehouse, Bow Common Lane, and Duckett Street, Mile End Road, formerly of Edinburgh, Glasgow, Paulet Road, Brixton, and Elgin Crescent, Bayswater, physician, surgeon, and accoucheur. April 12, High Court of Justice in Bankruptcy.

RALPH, PHILIP, Hereford, chemist, druggist, and farmer. March 27, Hereford.

THOMAE, FREDERICK (trading as Frederick Thomae & Co.), Crouch Hall Road, Hornsey, and Mincing Lane and Mark Lane, City, late of Hornsey Lane, merchant. March 27, High Court of Justice in Bankruptcy.

WALLACE, ALEXANDER, Colchester, physician, and florist and plant merchant, trading as the New Plant and Bulb Company. June 1, Town Hall, Colchester.

FAILURES AND BANKRUPTCY REPORTS.

ERNEST MARIE BOURJEAURD, 22 Davies Street, Berkeley Square, Surgical Appliance Manufacturer.

On Wednesday this debtor applied to Mr. Registrar Giffard to pass his public examination. The receiving order was made on January 14 on the debtor's own petition, and the statement of affairs shows total liabilities 1,340*l.* 10*s.* 7*d.*, of which 1,160*l.* 10*s.* 7*d.* is expected to rank, and assets 424*l.* 9*s.* 8*d.* In examination by the Official Solicitor, the debtor stated that he took over his business from his father in 1872, and was at that time fairly solvent. He had a capital of 300*l.*, and he thought the business would at that time have paid 20*s.* in the 1*l.* Until the last few years he had carried on the business at a fair profit. About five years ago, however, he ceased to carry on the business at a profit. The business had since gone down very much. During the last three years he had been paying off a lot of debts, which had come out of the assets of the business. About two years ago Mr. Bradley commenced proceedings against him, and he then knew he was insolvent. His ledger did not show all his creditors to whom he owed mone ut he had a file upon which he kept all his accounts, and m them he could always ascertain his position. He us to make out a private balance-sheet every week, putting wn expenses weekly, and he knew how he stood at the e of each year. He had mortgaged property, and his acc nts did not contain any statement as to that. He alway on-sidered the margin from his property to be worth 00*l.* During the last three years he had not incurred any bts with the exception of 30*l.*, and he had diminished a not increased his liabilities during that time. About two ars ago he had a writ issued against him. He paid the amounts by instalments, together with costs. Abou hat time he gave Mr. Bradley 250*l.* worth of book de to collect, Bradley lending him 120*l.* Bradley had fur hed him with no account in respect of those book debt He believed about 180*l.* worth had been collected. His ure was due to depreciation in the value of property, to ing had to pay 60 per cent. on the bill of sale he gave, l to illness. There was no opposition, and the examinati was ordered to be concluded.

Personalities.

MR. FIRMAN, chemist and wine merchant, The nal, Salisbury, has disposed of his business to Mr. William

MR. W. HICKMAN, Bridgwater, has disposed of his nch establishment at Burnham, Somerset, to Mr. Carpente

PROFESSOR DEWAR has contributed 100*l.* to the oyal Institution fund for the promotion of experimental r rch.

DR. JAMES BELL, F.R.S., the principal of the C nical Department, Somerset House, has been elected Pres t of the Institute of Chemistry, Professor Odling having r ed.

MR. HENRY MILES, who has for several years occ d an important position in the business of Messrs. Layman ns & Co., wholesale druggists, Montreal, has been taken i the partnership of the firm. The style will remain as he fore.

MESSRS. ORRIDGE & CO. are offering for sale by nder the chemist's business in Lincoln carried on for fort years by Messrs. Tomlinson & Hayward, and during the pa eight years by Mr. F. W. Bromley.

MR. TH. LUSCHER, of 10 Rue de la Paix, Pa well known to many English firms, will represent some these at the Universal Exhibition in Paris in 1889. Others shing to avail themselves of Mr. Luscher's assistance shou write to him early.

IN an obituary notice of Mr. Robert Mann, of Ne astle-on-Tyne, which we published on February 25, we sta that that gentleman retained the position of manager in firm of John Ismay & Sons until his death. In this state nt we were in error. Mr. Mann retired from the active nagement fifteen years ago.

THE University of Aberdeen has conferred the l orary degree of LL.D. upon Mr. Henry Bowman Brady .R.S., who is the first pharmaceutical chemist to get this stinction. It is not as a pharmacist, however, but as a n ralist of high note, and a specialist in certain of the mo econdite departments of marine zoology, that Mr. B dy is honoured.

Notes of Novelties.

HELIOTROPE PASTILLES.

FOLLOWING up the success of their "real violets" year, Messrs. Warrick Brothers have now brought forwa "real heliotrope pastilles." These, like the violets, are duced direct from the flowers, and yield lozenges of ver elicate fragrance and flavour. They are made in little hea haped, tablets and the bottles in which they are supplied ar belled in the most artistic manner. They are likely to e very popular odorants for the breath of fashion's elicate votaries.

Trade Report.

Notice to tail Buyers:—It should be remembered that the quotations in this secti are invariably the lowest net cash prices actually paid for large quan es in bulk. In many cases allowances have to be added before ordi y prices can be ascertained. Frequently goods must be picked and sorte o suit the demands of the retail trade, causing much labour and the umulation of rejections, not all of which are suitable, even for man cturing purposes.

It shoul also be recollected that for many articles the range of quality is very de.

42 Cannon Street, E.C., March 8

THER is no improvement in the general condition of the m kets, and so far as the drug trade proper is concerned a very ood idea of the tranquillity now reigning may be gather from the fact that one of the largest firms of drug broker for the first time within the memory of the oldest freque rs of the salerooms, found it unnecessary to go to the ex se of printing a catalogue, and therefore refrained from t ng part in the drug sales. These auctions passed off ve quietly, the twelve catalogues being quickly disposed Alterations in the market are few, and may be summe up as follows: Quinine and quicksilver are about in the sa position as last week, nor is there any important alterat in other chemicals, though some move seems impen g in borax. Shellac has further declined. Other rysalteries are unchanged. Cocoa butter dearer. Senna nd ipecacuanha sold at higher prices to-day, while sk was irregular, but generally lower. Vanilla made an adv ce of 1*s.* 6*d.* to 2*s.* for fine beans. Beeswax is also very fi . Essential oil of cassia is a shade better, but HGH peppe int and bergamot are again easier. Calabar beans and gr ea grains are scarce and dearer, and high prices are asked r cascarilla and canella alba. Cardamoms sold in buyers avour. Gum ammoniacum, gum benjamin, gamboge, and gu myrrh were also easier. Mogadore olive oil is a shade wer.

We nderstand that several well-known Italian essential-oil dis lers have made arrangements, through their English agents o be represented at the forthcoming Italian exhibition in ondon, which is to be opened by the Crown Prince of Italy i May next.

Pro sed Saccharin Works in England.—An American j nal states that Dr. Fahlberg, of saccharin fame, has re ntly been in London on business connected with a schem for erecting a saccharin works in England. The docto eclared that he originally intended to build his first sacch n works in the United States instead of Germany, but the A rican Customs tariff on the raw materials—coal tar produ s, sulphuric acid, &c.—stood in the way. At present the G man factory buys in England the benzol which it consu s.

Al ration in the Mails for Brazil and the River Plate.—The Brazilian and River Plate mails have hithe been dispatched from this country on the 9th and 24th each month, an arrangement which has given rise to a g d deal of inconvenience, especially when the dates in quest n happened to fall on Sunday. It is now announced that obviate this difficulty the mails will be dispatched from outhampton every alternate Thursday, commencing Marc 15.

Th Chemical Trade in Russia.—The chemical industr in the Moscow district is represented as being in a very urishing condition, and having greatly extended the mark for its products during the year 1887. Some of the Russ n works are now about to undertake the manufacture of th ner chemicals and pharmaceutical preparations, which have therto been supplied to Russian consumers by foreign, princ ally German, manufacturers. It is said that the output a l sale of hydrochloric acid in particular is very rapidly incre ing in Russia, from which it may be inferred that the alka ndustry in that country is also assuming larger proportions. Meanwhile the rumours that Russia intends to adopt something like a free-trade policy towards British goods, or at least concede to the latter much more favourable terms than she does to articles of German produce, are persistently revived. If adopted, such a policy would certainly not tend to improve the commercial relations between Germany and Russia, but Great Britain would no doubt reap a considerable, if temporary, benefit.

The Board of Trade Returns for February again bear witness to the steady revival of the country's trade. Our imports from abroad during the month were worth 29,532,776*l.*, against 28,513,994*l.* last February; but taking into account the extra leap-year day, it will be seen that the imports, taken day for day, are almost exactly equal to last February's. The only classes showing a decrease are articles of food and drink and oils. Manufactured goods, the Merchandise Marks Act notwithstanding, have slightly improved. On the two months together our imports, as compared with last year's, show an improvement of about 8 per cent. The exports of British and Irish produce total up to 18,992,423*l.* in February, 1888, against 17,225,133*l.* in February, 1887, an improvement of nearly 10 per cent., or, allowing for the extra day, of nearly 7 per cent. For the two months the figures are:—1888, 37,576,094*l.*; 1887, 35,063,868; increase, 2,512,226*l.*, or, say, 7½ per cent. The re-exports of colonial and foreign produce have decreased from 5,565,708*l.* in February, 1887, to 5,289,291*l.* in February, 1888, or nearly 5 per cent.

The Allotment of Shares in the New Produce Clearing-house took place yesterday, with the currently announced, though not yet officially published, result that the capital asked for has been offered fully eleven times. At first it was reported that the subscriptions had exceeded the amount required six-fold. The drug trade and, in fact, the bulk of the Mincing Lane traders generally, have apparently been left out in the cold, obtaining, in answer to their applications, only the cold comfort of the assurance that the directors of the Produce Clearing-house regretted to have been unable to allow them any shares in the concern. The prevailing feeling with regard to this general exclusion seemed one of surprise rather than of disappointment; and it is thought that it would have augured better for the future success of the undertaking if the directors had not, unfortunately, found themselves compelled to decline the proffered subscriptions of so many applicants. The opinion is also freely expressed that it would have been well for the clearing-house if the new undertaking had been more "broad based upon the (Mincing Lane) people's will" and co-operation than it seems likely to be now. A few days ago, we hear, the prospective shares were largely dealt in at fully 6*l.* premium, but to-day the highest premium obtainable was 3*l.* per share. We have heard it rumoured that it is contemplated, under the auspices of some merchants and brokers who have held aloof from the present scheme, to form a kind of rival clearing-house. This second undertaking would eventually be conducted by persons more closely identified with the articles traded in than are many of the promoters of the company now floated. The second company would also include within its scope other articles besides those to which the newly-floated concern is about to turn its attention in the first instance. Some firms largely interested in sugar are among those said to be favourable to the idea of a second clearing-house. The sugar interest, we believe, have, or had until recently, a kind of private organisation among subscribers for time-bargains in their particular branch of trade.

The Franco-Italian Tariff War.—Among the articles hitherto largely furnished by France which have now to pay an increased Customs duty in Italy are: Chlorinated lime, 3 lire (previously free); medicinal preparations, 240 lire (from 120 lire); essential oils, 10 lire (from 3 lire); fixed oils, 20 lire (from 15 lire); common soaps, 20 lire (from 8 lire); perfumed ditto, 100 lire (from 40 lire); glycerine soap, 140 lire (from 60 lire); perfumery, 200 lire (from 100 lire); alcoholic varnishes, 50 lire (from 30 lire); dyewood extracts, 30 lire (from 12.50 lire).

ACID (CITRIC).—There is very little business doing, and 1*s.* 7*d.* per lb. remains the nearest quotation. At the auctions to-day 8 casks (5 cwt. each), said to be of English manufacture, rather discoloured, were bought in at 1*s.* 7*d.* per lb. It is stated that an offer of 1*s.* 6*d.* was made for one of the lots. One of the effects of the rupture of the commercial treaty-negotiations between France and Italy may probably be that French orders for citric acid, which we lost some years ago, will again be sent to London. There is a large consumption of citric acid in France, and only one manufactory exists in that country. These works will now have to pay an increased duty of 15 francs per 100 kilos. on concentrated lemon-juice from Italy. The import duty upon citric acid in France, under the general tariff is 50 francs per 100 kilos.

ALOES.—*Cape* aloes show no improvement, the tendency being, on the contrary, somewhat easier. Of 97 cases the bulk remained unsold. Good bright hard aloes realised 22*s.*; very slightly drossy, 21*s.* to 21*s.* 6*d.*; good livery to partly livery, 20*s.* to 22*s.*; drossy, 16*s.* to 18*s.* 6*d.* per cwt. Only 54 cases *Curaçao* aloes were offered to-day, and a good proportion sold cheaply, at 57*s.* 6*d.* to 65*s.* for fair to good reddish liver; 45*s.* to 52*s.* 6*d.* for brown; and 30*s.* to 35*s.* for fair but dark. Thirty kegs soft brown *East Indian* (Socotrine) were bought in at 6*l.* 15*s.* per cwt.

AMBERGRIS.—No really fine ambergris was offered to-day. Three tins very small brown pieces were bought in at 70*s.* per oz. One tin blackish undeveloped ambergris sold at 35*s.* per oz., and for another of very common quality 5*s.* 6*d.* per oz. was refused.

ANISE.—Thirty bags *Russian* seed, rather stony and dusty, were bought in at 20*s.* per cwt.

ANNATTO without alteration for *seeds*, 2¼*d.* being the highest price obtainable for three bags fairly bright Java. Brazilian roll annatto is rather neglected, and holders would, perhaps, make a concession. They ask 1*s.* 6*d.* for fine fresh bright Pará, 1*s.* 3*d.* for fair, and 1*s.* per lb. for dark roll.

ARGOL.—Of 136 packages the greater part found buyers; *Cape*, very dusty and small grey, 78*s.* to 80*s.*; common red *Australian*, 40*s.* per cwt.

ARSENIC is still very scarce on the spot, but offering for forward delivery at easier prices than those quoted for available parcels, which are held at 11*s.* 9*d.* to 12*s.*

BALSAMS.—The Liverpool market for *Copaiba* remains firm at 2*s.* 2*d.* to 2*s.* 3*d.* per lb. for good Maranham, but these high quotations have caused purchasers to stand off. *Canada* unaltered, at 1*s.* 9*d.* per lb. for good bright. No *Copaiba* was offered at to-day's auctions. *Peruvian* all bought in at 4*s.* 9*d.* per lb.; 3*d.* less would no doubt be accepted.

BLEACHING-POWDER unchanged, with a fair inquiry.

BORAX.—It seems likely that some change in the mutual relations of the manufacturers is in contemplation. Several representatives of British and German houses are at present in town, and the inference may not be misplaced that they contemplate meeting in conference, to come to some understanding as regards the sale price of their produce. Nothing new to report. Makers are steady, and prices range up to 30*s.* and 32*s.* per cwt. for *English* refined.

BUCHU.—Quite neglected, and only a few bales sold at very low prices; dull oblong leaves, 1½*d.* Dark and broken long leaves are held at 6*d.* to 6½*d.* per lb.; fair yellowish round, slightly stalky, bought in at 3*d.* per lb.

CABARDINE pods, bold trimmed China, bought in at 50*s.* per oz.; wormy and skinny sold at 9*s.* per oz.; good trimmed Russian pods bought in at 37*s.* *Grain* musk sold up to 47*s.* per oz. for fairly good flavoured Assam, and from 38*s.* down to 11*s.* for less desirable parcels. *Trimmings* brought 1*s.* to 1*s.* 1*d.* per oz.

CALABAR BEANS.—For this, as for some other West-African drugs, a pretty brisk inquiry has prevailed lately, and up to 6*d.* per lb. was paid at Liverpool.

CALUMBA.—Only 268 bags were placed in auction to-day, but nothing was sold. For dark dusty and wormy root an offer of 9*s.* 3*d.* per cwt. was declined. Ordinary dull root bought in at 16*s.* per cwt.

CANELLA ALBA.—Two shipments, together 218 packages, recently landed, are held at high limits. There is no of fine quality among the lots, nearly all of which are badly sea-damaged. Mixed thin to bold quill, darkis damaged, is held at 20*s.* per cwt.

CANTHARIDES.—Chinese flies are plentiful, but there demand, and the whole was bought in at 1*s.* 8*d.* to 1 per lb.

CARDAMOMS.—At the auctions 140 cases were offere except towards the end, an extremely languid tone pre and the greater part was bought in. The lots sold w buyers' favour, at from 1*d.* to 2*d.* per lb. decline. Tl lowing prices were paid:—*Malabar*: good round s yellow, 1*s.* 11*d.* per lb.; *Mangalore* character, fair m sized pale, 1*s.* 10*d.* per lb.; small ditto, 1*s.* 5*d.* per lb.; *Malabar*: fine medium to bold plump bright, 2*s.* 2*d.* plump, rather small, 1*s.* 6*d.*; good medium palish, s specky, 1*s.* 4*d.*; fair plump yellow, 1*s.* 3*d.*; plump but sp fair bold brownish, 1*s.* 1*d.* to 1*s.* 3*d.*; small and warty, 1s small pale, 10*d.* to 9½*d.*; dull brown, very specky, 6*d.*; *M* good pale medium smooth held at 1*s.* 11*d.* per lb., and smaller at 1*s.* 9*d.*; good medium-sized pale s 1*s.* 6*d.* to 1*s.* 8*d.*; small to medium, slightly greenish, 1 long yellowish to dull, partly mouldly, 1*s.* 3*d.* to 1 *Tellicherry*: small shelly bought in at 7*d.* per lb.; *Ceylon*: good but slightly damp sold at 1*s.* 4*d.* per lb and mouldy at 6*d.* to 6½*d.* per lb. *Seed* realised 1*s* 1*s.* 4*d.* per lb. The Ceylon shipments from Octob February 9 were:—1887–88, 136,772 lbs.; 1886–87, 123,1 1885–86, 103,417 lbs.

CASCARILLA remains scarce, and is held at ve prices. A parcel of thin brown pieces, very dusty, 25*s.*; duller at 23*s.* per cwt.

CASSIA FISTULA.—About 100 packages were off to-day's auctions. Twenty of these, lean dry poo without reserve at 9*s.* to 9*s.* 6*d.* per cwt., while an 3*s.* was refused for 59 packages wormy and mould Twenty baskets from Java were bought in at 14*s.* per

CHALK.—Eighty bags French chalk were bough 110*s.* per cwt. nominally—quite a fancy figure.

CHAMOMILES.—The demand continues very goo *Belgian* flowers of the last crop being held up to 6*l.* 6*l.* 10*s.* per cwt.

CINCHONA.—A recent report calls attention to that the proportion of really good Ceylon bark offere the public auctions remains very limited. At the last b only one parcel of Ceylon cinchona realised mo 1*s.* per lb., and many renewed barks now offered, woody and fibrous character, clearly show that the process is being resorted to too often, viz., that the barks are stripped too soon. The exact figures of the c shipments from Ceylon from October 1 (commence the season) up to February 25 are given as follows:— 3,740,000 lbs.; 1886–7 (February 24), 6,291,948 lbs. 5,882,029 lbs. Of *South American* bark a rather assortment was offered than is usual at the dr Rusty papery Guayaquil quill was bought in at 5 per lb. Flat Calisaya bark in good supply, but inquiry. A slight reduction upon the figures paid a auctions might prove acceptable. For good bright bark 2*s.* is asked, 1*s.* 11*d.* having been refused; dark damaged sold at 1*s.* 2*d.* to 1*s.* 4*d* per lb. Of *Ea* bark 10 cases mossy yellow quill, rather papery, Neilgherry plantations, was bought in at 1*s.* 6*d.* per

COCOA BUTTER.—At the monthly auctions held day, 250 cases (2 cwts. each) *Cadbury's* brand irregular rates, ranging between 1*s.* 1½*d.* to 1*s.* 2⅛*d.* lots sold dearest, and the advance upon the last sale about 1*d.* per lb.

COCA LEAVES.—Several parcels were offered to they did not include any fine leaves. One lot, the bought in at 1*s.* per lb., the remainder, dark and di at 5*d.* per lb.

COCHINEAL remains very neglected, with smal ordinary black *Teneriffe* at 1*s.* 0½*d.* per lb. The fin ties are worth from 1*s.* 4*d.* to 1*s.* 6*d.* per lb.; silv 1*s.* 4*d.* per lb.

COLCHICUM.—About 6 cwts. seeds were offered, b

in at 8. per cwt., about 15*s.* less being suggested as the price.

CUBEBS.—There was no scarcity of spurious cubebs at to-day's sctions. Two bags bold brown berries (imported *viâ* New York) sold at 17*l.* 5*s.* per cwt., the bidding commencing at 11*l.* two other bags spurious, mixed with genuine berries, a direct importation from Batavia, were bought in at 24*l.* (17*l.* 1. being refused). Four bags, quite spurious, were all bought in at 15*l.* per cwt.

CUMIN SEED.—Good fresh Malta seed is limited at 50*s.* per cwt., but for one or two parcels offered at the drug auction no bids were made.

DILL SEED.—306 bags from Bombay are obtainable at 12*s.* per cwt.

DRAGONSBLOOD.—Very little offering. Two cases bricky slabs out of reed, of fairly bright colour, are held at 5*l.* 5*s.* per cwt.

ERGOT OF RYE.—All bought in, good new *Spanish* (forty cases) at 2*s.* 6*d.* per lb. nominally; four bags new *Russian* at 2*s.*; three bags wormy old ditto at 1*s.* 9*d.* per lb.

FENNEL SEED.—Good quality *East Indian* bought in at 20*s.* per cwt.; a slightly sea-damaged lot sold at 11*s.* per cwt.

GAMBOGE.—Prices are again somewhat lower, part of the 16 cases offered selling at 10*l.* for ordinary damp eake, while block pipe, partly of good and partly of dark dull fracture, is held at 11*l.* 2*s.* 6*d.* per cwt. Four cases of "powdered gamboge," of which no sample was shown, imported from (or *viâ*) Australia, and bearing the well-known F. G & Co. mark, were bought in at 15*l.*, the limit being 11*l.* per cwt.

GERMAN ROOT.—An offer of 16*s.* per cwt. was refused for 2 bales partly thin French root, for which 17*s.* is required. The Italian markets are again quite bare of stock and 16*s.* 6*d.* to 17*s.* per cwt. is the price nominally quoted there, a slight advance since last month.

GLYCERINE.—Makers still quote 75*l.* for double distilled, sp. g. 1.250. Business, however, is very restricted, in anticipation it is said, of the fate of the tariff reform Bill in the United States, where the duty on refined glycerine, which it is proposed to place on the free list, is now 5 cents per lb.

GUM AMMONIACUM.—Three cases fairly good, but old, partly blocky drop sold "without reserve" at the very cheap rate of 19*s.* per cwt.

GUM ARABIC.—The better qualities of soluble gum continue to realise very high prices. At to-day's auctions *selected Turkish* gum, rather dull thirds, brought 25*l.* 10*s.* per cwt. Good bold picked yellow is held at 28*l.*, while for rather dark and small 24*l.* is required. The price of *Senegal* gum is well maintained, at 7*l.* 5*s.* per cwt. for Galam. *Aden* siftings, good small pale, are limited at 10*l.* 10*s.*; and nine bales good glassy, partly reddish dross, strongly olibanum-scented, were bought in at 7*l.* per cwt. Of *Cape* gum, good pale picked dross sold at 7*l.* 2*s.* 6*d.*; pale siftings at 5*l.* 5*s.*; small brown at 66*s.*; dull siftings at 46*s.* to 37*s.* per cwt. As regards *Barbary* gum, the crop, both of Amrad and brown gums, is practically at an end. For ordinary brown, 5*l.* per cwt. has been paid.

GUM BENJAMIN.—*Siam* gum without much demand. An offer of 19*l.* was refused (20*l.* being required) for very small to medium, partly drossy, mixed almonds. Small dull old almonds of weak flavour are held at 16*l.* per cwt, while 7*l.* was declined for very ordinary woody and drossy dust. *Sumatra* gum must be quoted rather lower, partly on account of forced sales. Thirty cases sold "without reserve" as follows:—Fine white almondy seconds of good flavour, slightly brown corners, from 9*l.* to 9*l.* 7*s.* 6*d.* per cwt.; good pale almonds, false-packed corners, at 9*l.*, mostly for export, and from 10*s.* to 15*s.* under valuation; slightly almondy, fair thirds, rather false packed, 5*l.* 17*s.* 6*d.* to 6*l.*

GUM ELEMI.—Four cases good pale Manila sold at 36*s.* per cwt.

GUM EUPHORBIUM.—Sixteen serons Mogadore sold cheaply, medium, very dusty, at 16*s.* to 16*s.* 6*d.*; dark mixed with heavy stones, 10*s.* per cwt.

GUM MYRRH slightly lower, 6*l.* 7*s.* 6*d.* being accepted for good pale selected gum. Another lot is held at 6*l.* 10*s.* Good brown siftings sold at 37*s.* 6*d.*; pickings, good to common, 50*s.* to 32*s.* per cwt.

HONEY.—Several parcels were offered for sale to-day, and met with a very good demand, although occasionally selling at low rates. The best bargain, no doubt, was a lot of 13 kegs very fine clean white candied *Chilian* honey, which sold at 38*s.* per cwt. Nine barrels bright yellow *New Zealand* were partly sold at 35*s.* Fifty cases unsightly *Californian* were bought in at 10*s.* per case of 24 2-lb. tins. *Jamaica* honey in good supply. Good pale candied "Orange-blossom" is limited at 40*s.* Fair palish candied sold at 28*s.*; good brown liquid, 26*s.*; good candied yellow (without reserve), 26*s.* 6*d.*; clean brown, half-candied, 24*s.* 6*d.* to 23*s.*; ordinary liquid slate-coloured, 15*s.* per cwt.

INSECT FLOWERS.—The "c.i.f." quotations are: For open flowers, 208*s.*; half-closed, 217*s.*; closed, 227*s.* per cwt. To render these quotations "London terms" about 13*s* per cwt. should be added. The position of the article is firm.

IPECACUANHA.—Nineteen packages were offered for sale, but, being held at very high limits by the importers, only two cases were sold at 7*s.* 5*d.* per lb. for fair selected, an advance of 5*d.* per lb. upon the last auction rates. Fairly good partly thin root is limited at 6*s.* 10*d.* for sound, and 6*s.* 9*d.* per lb. for slightly damaged. Higher rates are expected to rule, as our stock has fallen very low. America is buying here all available lots, even of ordinary quality, and it is said that the severe winter has caused a demand for the article much in excess of the average. On the Continent there seems to be hardly any stock.

JABORANDI LEAVES in steady demand; 6¼*d.* to 6½*d.* per lb. is the nearest price.

JUNIPER BERRIES.—The supply of juniper berries in Italy has been almost cleared by French houses, and only a few hundred bags are left at Leghorn now. A further reduction in value, therefore, does not seem probable. At present the Italian quotations, according to quality, range from 13*s.* to 16*s.* 6*d.* per cwt.

MUSK.—The market for Tonquin pod musk is irregular, the best qualities being worth about 5*s.* less than at the last auctions, but medium first pile selling in one instance about 2*s.* 6*d.* above the valuation. The following was the result of the auctions:—Six caddies *Tonquin* pods, first pile, small to medium thin blue skin, well trimmed, were bought in at 100*s.* per oz., an offer of 93*s.* for the whole parcel being refused. Three tins small to bold, slightly damp, well-trimmed old-fashioned pods of good appearance sold at 88*s.*; and four caddies damp pods, with skin and underskin, indifferently trimmed, at 85*s.*, rather above the valuation. Third pile, fairly dry, and of good appearance, sold at 39*s.* to 40*s.*

NUX VOMICA.—Nine bales recently imported Bombay seeds sold at 8*s.* 6*d.* per cwt. for small pale silky, and at 8*s.* for mouldy. The *Ganges* has just arrived from Bombay with a small shipment of 34 packages. On February 14 prices in Calcutta were nominal, at 3 rs. 6 a. per maund for cleaned seed, and the market was without business.

OIL (CASTOR).—The demand seems slack, but prices keep up well. Fine Italian oil is held at 4¼*d.* per lb., first *Calcutta* at 4*d.*, good pale *Coconada* (in rusty tins) at 2 7/16*d.*, yellow at 2½*d.* per lb. The arrivals of oil from Coconada this week have been heavy.

OIL (COD-LIVER).—Speculators are still offering at very low prices, but it may be doubted whether they have any other object than to depress the market abnormally. For steam-refined Lofoden oil from 3*s.* 9*d.* to 4*s.* per gallon, London terms, is asked. The result of the fishing is slightly in excess of last season's, although from the northern districts no recent official statistics have been received. The fishing will terminate at Easter, the Finnmarken fishing coming afterwards.

OIL (OLIVE) without business of any importance. *Mogadore* oil cannot now be quoted higher than 33*l.*, while *Sicilian* and *Spanish* oils are a dead letter for the moment—the former at 34*l.* to 35*l.*, the latter at 37*l.* nominally. Naples advices report a steady market with firmer prices at the close for Gallipoli oil, owing, it seems, to speculative purchases on the part of one firm, who appear to aim at monopolising the market. The export demand remains very

slack for abroad, but good as regards Northern Italy. The rupture of the Franco-Italian commercial negotiations, and the consequent prohibitive increase of the Italian tariff on seed oil, will greatly increase the consumption of olive oil in Italy, and reduce proportionately the exporting capacity of that country.

OILS (ESSENTIAL).—*Bitter almond* oil, according to degree of freedom from prussic acid, may be had at 13*s.* to 14*s.* 6*d.* per lb. *Anise*, from German or Russian seed, is quoted at 10*s.* to 10*s.* 6*d.* per lb. *Star anise* still offers, on the spot, at 6*s.* 5*d.*, while there are sellers, but no buyers, at 6*s.* per lb. c.i.f. terms. *Bergamot* is rather easier, and quoted up to 9*s.* per lb. for fine quality. *Carraway*, English, 6*s.* 3*d.*, foreign, 5*s.* 9*d.* per lb. *Cassia* somewhat dearer, having sold at 3*s.* 1*d.* on the spot; while for arrival, 2*s.* 10*d.* c.i.f. is asked. *Cinnamon* unchanged at 1*s.* 3*d.* to 1*s.* 6*d.* for fairly good quality. *Cinnamon leaf* dull. *Citronella* quiet at $\frac{15}{16}$*d.* per oz. *Cloves* (English distilled), 5*s.* 9*d.* per lb. Italian *lemon* fairly steady at 4*s.* 6*d.* to 4*s.* 9*d.* per lb. here for fair quality. *Neroli* firm, and held, for bigarade, at 10*s.* 6*d* per oz.; ordinary, 7*s.* 6*d.* to 9*s.* 3*d.* per oz. At the auctions 16 bottles from the "Parfumerie des Alpes" sold, without reserve, at 2*s.* 11*d.* to 3*s.* per oz. Good *Nutmeg* oil is worth $4\frac{1}{4}$*d.* per oz. *Patchouly*, distilled in France, 4*s.* 1*d.* per oz.; Indian, 3*s.* $3\frac{1}{2}$*d.* per oz. *Peppermint* cheaper for American, H.G.H. on the spot being obtainable at 10*s.* 6*d.* per lb. Several cases Japanese *menthol crystals* sold without reserve, fairly good white but dampish, 5*s.* to 5*s.* 2*d.* (5*s.* 3*d.* was refused for a better lot), damp and yellow rusty at 4*s.* 11*d.* per lb. *Rosemary*, fair to finest pure, 2*s.* 6*d.* to 3*s.* $0\frac{1}{2}$*d.* per lb. *Sandalwood* oil, English distilled is worth 20*s.* per lb.; yellow West Indian, 11*s.* 6*d.*; East Indian, 19*s.* 6*d.* per lb. *Thyme*: pure oil of red thyme, 3*s.* 10*d.*; ditto, white, 4*s.* 3*d.* per lb. *Wintergreen* oil may be quoted at 12*s.* per lb. *Ylang-ylang*: All sorts of prices are quoted, but we may put the nearest value of good to fine oil at from 13*s.* to 18*s*, per oz.

ORANGE PEEL in plentiful supply, but the demand is somewhat weak. For new *Malta* peel, fine bright thin machine-cut, almost free from pith, 1*s.* 6*d.* is required, and from 1*s.* 2*d.* to 1*s.* 4*d.* for darker lots. Good bright ringlets were bought in at 10*d* per lb., darker ditto at 8*d.* per lb.

ORRIS ROOT.—In Italy the quotations remain extremely firm, 50*s.* to 50*s.* 6*d.* per cwt. being locally asked for selected Florentine root, 45*s.* to 46*s.* for small and darkish ditto. *Veronese* orris is worth in Italy from 21*s.* to 26*s.* per cwt. Business in all varieties remains very restricted at these high rates, but the small stock is in the hands of very firm owners, and it is stated that the new crop will prove to be still smaller than the preceding one.

PATCHOULY LEAVES.—Five bales fairly good flavoured but very dusty and slightly stalky leaves sold without reserve at $6\frac{1}{2}$*d.* per lb.

POTASSIUM SALTS.—*Bichromate* quiet at the unchanged price of $4\frac{1}{2}$*d.* per lb. *Bromide.*—Last week we quoted the price as 1*s.* 5*d.* to 1*s.* 6*d.* per lb. It should have been 1*s.* 6*d.* to 1*s.* 7*d.* per lb., according to quantity. At these latter figures bromide remains very firmly held. *Chlorate* unaltered, at $5\frac{3}{4}$*d.* to 6*d.* per lb. *Cyanide*, 30 per cent. white sticks, 1*s.* $2\frac{1}{2}$*d.*; cakes, 1*s* $\frac{1}{2}$*d.* to 1*s.* 1*d.* per lb. *Iodide* unaltered, at 11*s.* 3*d.* to 11*s.* 6*d.* per lb., according to purity. *Oxalate*, neutral recrystallised, $6\frac{1}{4}$*d.* per lb. *Permanganate*, in crystals, from 85*s.* to 90*s.* per cwt. *Prussiate.*—No change to report. Yellow quiet, at $7\frac{1}{4}$*d.* per lb.; red 1*s.* $5\frac{1}{2}$*d.* per lb.

QUICKSILVER.—The decline has made further progress. From 8*l.* 1*s.* 3*d.* to 8*l.* 2*s.* 6*d.* was quoted by second-hand owners on Monday. At the close, after several variations, the article is rather firmer, second-hand holders asking 8*l.* 5*s.*

QUILLAYA declining in consequence of heavier arrivals, and not quotable over 14*l.* 5*s.* to 14*l.* 10*s.* per ton.

QUININE has remained dull since our last report. The German makers still quote 2*s.* per oz. for bulk, but we have not heard of any business of importance at this price, and none is, indeed, likely to take place so long as second-hand holders are willing to accept 1*s.* 10*d.*, or even, perhaps, 1*s.* $9\frac{1}{2}$*d.* per oz.

RHUBARB.—To-day 135 cases were offered, but the greater part remained unsold, and values show no quotable change. *Shensi* root sold as follows:—Good round druggists' root, of fair fracture, 2*s.* 3*d.*; smaller ditto, 2*s.*; small to me round, pale coated, partly dark fracture, 1*s.* 3*d.* to 1*s.* 4*d.*; flat, rather brighter, 1*s.* 4*d.* per lb. *Canton*—mediu bold, colourless, dull coated, 1*s.* to 1*s.* 1*d.* per lb. *High* —flat, small to very bold, fair pinky fracture, p dark, 1*s.*; wormy and common, $5\frac{1}{2}$*d.* to $8\frac{1}{2}$*d.*

SALICIN quoted at 20*s.*, and firm.

SARSAPARILLA.—A small lot sea-damaged grey *Jam* sold at 1*s.* 9*d.* per lb.; good red native at 1*s.* 5*d.*; *Jamaica*, damaged, at 1*s.* 4*d.*; *Honduras* crown, $8\frac{1}{2}$*d.* t *Mexican* (Vera Cruz), 5*d.* per lb.

SENNA.—*Tinnevelly* sold at much better prices, the of the 121 packages offered being disposed of at 8*d.* for bold green, 4*d.* for good medium greenish, and from 3*d.* to $1\frac{1}{4}$*d.* per lb. for fair to ordinary dark.

SHELLAC.—The week opened with sales of *second o* lac (TN standard) for February-April shipment at 47 per cwt. c.i.f. terms. At Tuesday's auctions a very supply was brought forward—viz., 1,585 chests, mostly sisting of *garnet* and *button* lacs, and including 779 "without reserve." It was generally anticipated that an evident desire on the part of holders to sell would in a rather serious decline; but, although prices gave some extent, the fall was not so large as had been exp *Orange* lac sold at a decline of from 1*s.* to 3*s.* per cwt qualities showing the heaviest reduction: *garnet* went 6*d.* to 1*s.* 6*d.*, and *button* lac from 3*s.* to 4*s.* cheaper fo Altogether 1,237 chests were disposed of at the foll rates:—*First orange*, G in double triangle, fair colou slightly blocky and out of condition, 57*s.* to 60*s.* *orange*, fair palish, 45*s.* to 46*s.*, mostly 45*s.* 6*d.*; r 43*s.* 6*d.* to 44*s.* 6*d.*; SD in circle, 50*s.* to 51*s.* *Garn* AC good bright free, 37*s.* to 37*s.* 6*d.*; dark, 36*s.* to 36 blocky, 33*s.* to 35*s.* *Button lac*, good firsts, rather standard, at 55*s.* to 56*s.* per cwt.; fair but dark, 52*s.* seconds, 48*s.* 6*d.* to 50*s.* per cwt. 63 chests *Kurrach* fair reddish mixed, but cakey and out of conditio bought in at 60*s.* per cwt. nominally. The stock of s in Calcutta is said to be accumulating, and hold pressing for sale.

SILVER NITRATE.—The price of *Schering's* bran mically pure, is now 2*s.* 7*d.* per oz. for quantities of a 500 oz., c.i.f. London.

SOAP (CASTILE).—Unchanged after the recent re in price. Marseilles soap: white, 31*s.* to 31*s.* 6*d.*; m 24*s.* to 24*s.* 6*d.* From Leghorn we hear that the dema *Conti's* brand has improved: the quotations on that as follows:—*Conti's* white, according to shape, 37 41*s.* 6*d.*; green, 21*s.* 6*d.*; mottled, 17*s.* 6*d.* to 1 per cwt.

STICKLAC.—Of 392 cases, including 7 of pressed cake Kurrachee, only 10 cases fairly bright small Bombay 29*s.* to 30*s.* per cwt. *Siam* of good quality, pretty fre wood, was bought in at 38*s.* per cwt.

STROPHANTHUS.—Eight bags green seed were bo at 10*s.* per lb., but it was understood that an offe would be submitted. Damages sold at 4*s.* 6*d.* per lb.

STRYCHNINE.—Messrs. Böhringer's brand has be vanced in price, in consequence of the continued sea nux vomica, to 2*s.* 5*d.* per oz. for pure crystals.

SULPHUR.—Elsewhere in our columns a full acco be found of the new process for recovering sulphur fr vat waste in alkali manufacture. This process is li influence very considerably the position of the sulp alkali industry. Sulphur obtained by Mr. Chance's in *flowers* and *block* and absolutely pure, are qu Messrs. Chance Brothers, of Oldbury, at 12*l.* per ton. *flowers* are very neglected at 7*s.* 6*d.* to 8*s.* 9*d.*, *roll* at to 6*s.* 6*d.* per cwt.

TURMERIC.—The 1,305 bags, mostly Madras root, at Tuesday's auctions met with very little interest, a about 100 bags slightly wormy *Madras* bulbs, of u appearance, partly damaged, sold at 6*s.* to 6*s.* 6*d.* *Cochin* and *Bengal* root all bought in.

VIOLET EXTRACT.—Three cases alcoholic extract 4 11-lb. tins, sold in bond at 1*s.* per lb.

BOARD OF TRADE RETURNS.

Imports		Feb., 1886	Feb., 1887	Feb., 1888
Drugs, unenumerated ..	value £	50,742	45,060	79,587
Chemical manufactures and products, unenumerated ..	"	113,606	94,483	116,003
Chemicals & dyestuffs, unen.	"	218,144	194,504	235,325
Oils, unenumerated ..	"	82,228	83,141	82,040
Alkali	cwt.	5,507	3,449	4,180
"	value £	3,292	2,149	3,310
Brimstone	cwt.	99,053	59,519	74,544
"	value £	23,721	13,825	16,910
Nitrate of soda	cwt.	111,444	30,007	214,060
" "	value £	61,112	13,505	95,251
" of potash	cwt.	28,762	19,322	32,645
" "	value £	25,225	16,465	27,419
Quicksilver	lbs.	936,600	723,085	806,850
"	value £	75,000	70,121	95,107
Cinchona bark	cwt.	9,082	11,416	8,646
" "	value £	61,316	56,081	36,493
Gum Arabic	cwt.	16,933	2,017	5,438
"	value £	60,817	10,320	28,548
Lac, seed, shell, stick, and dye	cwt.	11,163	7,122	10,732
" " " "	value £	33,402	20,028	28,452
Cinnamon	lbs.	191,156	89,855	126,333
"	value £	6,295	2,735	3,348
Ginger	cwt.	3,150	2,530	1,787
"	value £	5,747	4,102	4,981
Pepper	lbs.	879,746	1,676,127	1,770,371
"	value £	24,704	49,951	55,985
Bark (for tanners' or dyers' use)	cwt.	17,361	12,841	11,886
" " " "	value £	5,687	4,446	3,722
Aniline	"	22,471	20,866	23,554
Alizarin	"	22,149	17,925	18,197
Other coal-tar dyes	"	18	5	1,181
Cochineal	cwt.	1,720	980	7,0
"	value £	11,053	6,033	4,599
Cutch and gambier	tons	2,805	1,563	1,582
" " ..	value £	61,035	34,643	38,878
Indigo	cwt.	28,950	23,715	20,745
"	value £	738,150	560,472	478,415
Madder madder root, &c. ..	cwt.	2,494	1,661	1,315
" " "	value £	2,821	2,231	1,807
Cocoa-nut oil	cwt.	5,377	5,174	5,567
" "	value £	6,829	8,777	6,691
Olive	tuns	1,396	2,744	2,263
"	value £	55,478	100,984	76,517
Palm	cwt.	63,345	63,419	75,198
"	value £	74,319	66,734	74,241
Petroleum oil	gals.	3,503,148	8,721,788	6,835,619
" "	value £	111,439	230,733	197,332
Oil seed	tons	1,221	965	1,600
"	value £	29,436	22,764	38,943
Turpentine	cwt.	32,734	25,206	29,167
"	value £	45,033	35,383	40,677
Exports				
British and Irish produce—				
Drugs and medicinal preparations, unenumerated	value £	59,898	63,321	68,691
Sundry chemicals	"	148,299	174,819	178,297
Paints, colours and materials	"	96,277	104,393	110,147
Alkali	cwt.	481,683	441,411	482,721
"	value £	136,546	125,209	127,312
Bleaching materials	cwt.	109,864	127,944	128,310
" "	value £	41,336	47,709	48,350
Seed	tons	5,797	5,759	6,569
"	value £	122,910	119,094	134,599
Soap	cwt.	35,037	38,804	44,444
"	value £	38,785	37,553	42,157
Foreign and Colonial merchandise—				
Chemicals, unenumerated ..	"	12,463	12,280	30,828
Cinchona bark	cwt.	10,030	17,476	10,491
" "	value £	46,699	76,560	31,653
Cochineal	cwt.	1,034	653	367
"	value £	7,698	4,514	2,282
Cutch and gambier	tons	773	611	757
" "	value £	19,405	15,481	19,708
Gum Arabic	cwt.	2,409	3,852	3,752
" "	value £	10,374	17,496	15,941
Indigo	cwt.	10,793	10,003	11,163
"	value £	261,930	229,046	260,599
Lac, seed, shell, stick, and dye..	cwt.	6,703	4,381	4,102
" " " "	value £	19,432	12,484	12,596
Cocoa-nut oil	cwt.	6,174	3,186	2,690
" "	value £	8,562	4,507	3,330
Olive	tuns	121	130	302
"	value £	6,329	5,769	11,085
Palm	cwt.	36,418	33,519	58,983
"	value £	42,734	36,568	58,516
Petroleum oil	gals.	44,412	26,620	38,854
" "	value £	2,125	1,223	1,562
Quicksilver	lbs.	367,964	242,380	118,169
Nitrate of potash	value £	28,332	22,979	13,712
"	cwt.	1,155	818	2,808
Cinnamon	value £	1,021	667	2,428
"	lbs.	154,101	96,100	85,200
Pepper	value £	4,979	3,234	3,296
"	lbs.	1,093,379	1,223,000	969,300
"	value £	38,189	39,877	33,260

LONDON DRUG STATISTICS.

THE following figures refer to the stocks of the principal drugs in the Port of London on February 29, 1888, and to the imports and deliveries from January 1 to February 29, as compared with the preceding year:—

Article	Stocks		Imported		Delivered	
	1888	1887	1888	1887	1888	1887
Aloes .....cs	4,695	5,158	437	968	953	840
" .....kegs	3	12	—	—	4	—
" .....gourds	4,600	—	98	—	177	10
Anise, Star .. chts	201	235	25	12	5	16
Arrowroot ....cks	13,328	11,462	2,662	1,763	2,297	2,177
" bxs & tius	7,446	5,963	648	2,579	1,248	1,121
Balsams ..cks, &c.	429	549	9	32	189	174
Bark, Medicinal cks & cs	12,437	8,145	4,661	6,159	4,178	5,883
" srns, &c.	47,383	53,552	6,635	7,719	6,622	8,646
Borax.....pkgs	487	1,490	—	582	—	196
Calumba .... "	2,601	1,536	—	170	197	161
Camphor .... "	1,801	5,244	1,062	1,196	1,240	2,128
Cardamoms ..chts	996	751	648	769	275	634
Cocc. Ind. bgs, &c.	275	450	—	10	11	—
Cochineal srns, &c.	5,898	6,693	1,207	738	619	907
Cream of Tartar cks	13	11	—	—	—	—
Cubebs .....bgs	13	27	—	3	100	68
Dragon's Blood chts	99	163	31	56	31	29
Galls, China, &c. cs	4,009	2,048	2,772	144	547	689
Trky & Prsn sks	2,552	5,048	979	1,631	1,397	514
Gum—						
Ammoniac pkgs	225	167	5	—	16	22
Animi & Copal pkgs	4,435	5,086	1,989	814	1,963	1,980
Arabic..... "	11,311	13,875	3,489	2,178	3,453	3,678
Asafœtida.. "	524	731	125	—	57	46
Benjamin .. "	1,492	1,643	529	366	568	289
Damar .... "	3,202	5,203	722	307	942	859
Galbanum.. "	—	9	—	1	—	1
Gamboge .. "	86	112	45	36	24	31
Guaiacum .. "	59	77	3	30	23	3
Kino ..... "	102	87	30	4	4	28
Kowrie ....tons	440	674	335	227	396	330
Mastic ....pkgs	113	137	12	—	4	4
Myrrh..... "	462	357	32	158	98	97
Olibanum .. "	5,507	3,797	2,140	1,030	617	855
Sandarac .. "	1,273	1,180	438	312	214	379
Tragacanth "	3,398	1,119	2,493	801	999	285
Indiarubber, E.I. tons	282	80	67	40	39	92
Madagascar.. "	53	8	41	20	12	21
S. American ..,,	119	64	68	50	59	23
Mozambique.. "	633	276	213	132	153	146
African, &c... "	47	—	49	—	28	—
Total	1,134	428	428	242	291	282
Indigo, East Indian chts	11,931	13,425	6,690	6,208	3,006	3,415
" Spanish srns	6,435	5,102	4,988	3,382	368	307
Ipecac. casks & bags	62	22	24	77	120	126
Jalap .....bls	143	149	—	—	3	13
Lac Dye .....chts	6,920	7,813	—	—	246	30
Myrabolans ..tus	9,761	8,803	1,215	2,217	1,999	1,370
Nux Vomica pkgs	319	571	224	34	451	162
Oils—						
Anise .....cs	55	150	40	25	37	50
Cassia ..... "	172	79	60	—	51	20
Castor .....cks	820	599	96	180	148	179
" .....cs	10,166	6,000	4,393	1,310	1,742	1,779
Cocoa-nut....tns	1,812	1,539	726	772	736	533
Olive ..cks, &c.	888	926	451	848	244	753
Palm .....tns	250	185	55	17	12	11
Opium ..chts, &c.	1,886	2,041	87	345	306	411
Rhubarb.....chts	987	1,685	127	190	274	261
Safflower .....pkgs	303	396	—	76	56	105
Sarsaparilla ....bls	546	469	304	253	179	239
Senna .... bls, &c.	2,380	981	598	712	725	893
Shellac, Orange chts, &c.	48,226	37,463	11,907	5,238	5,673	4,621
Garnet.. "	16,847	12,752	2,370	1,946	704	805
Button.. "	10,734	10,909	859	908	1,243	1,507
Total ..chests	75,807	61,124	15,136	8,092	7,620	6,933
Sticklac ..chts, &c.	4,730	4,220	401	92	62	81
Gambier .....tns	1,279	1,166	1,823	1,524	2,432	2,005
Cutch ..... "	2,139	1,283	1,669	494	473	549
Turmeric .... "	2,639	2,015	165	338	158	235
Vermilion, chts, &c.	47	34	10	—	26	20
Wax, bees' ..bls & srns	748	1,092	28	47	92	126
" cks & cs	1,558	1,317	228	499	404	517
" cakes	42	89	24	—	—	—
Wax, Japan...pkgs	1,180	1,304	540	260	272	303

Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

The Medicine Stamp Act.

Messrs. Burroughs, Wellcome & Co. write to offer 10*l.* towards any guarantee fund which may be raised for testing the question of the possessive case in any trial which would come within the limits covered by Mr. Finlay's opinion. Or Messrs. Burroughs, Wellcome & Co. would subscribe 10*l.* towards a fund having for its object the repeal of the Medicine Stamp Act altogether.

We may say in answer to some misapprehension that we are not disposed ourselves to organise any defence of chemists under the Act, or any attack on the Act. Our Northern friends found the claims of the Board of Inland Revenue, in regard to Blaud's Pills and other common preparations in which no sort of proprietary right was claimed, very objectionable, and many of them expressed a desire to resist them. We took the opinion of a leading Q.C., which was decidedly in their favour, and we have shown them that a guarantee fund could be easily raised if they care enough about the question to contest the claim. It is for them and others interested to organise resistance if they think fit.

Mr. A. Hodgson (3 Millbrook Place, Harrington Square, N.W.) also writes that he would willingly subscribe 1*l.* 1*s.* if a sufficient number of other chemists would do the same.

SIR,—I shall be glad to subscribe 2*l.* 2*s.* to the fund for testing the question in regard to the liability of "Blaud's Pills," or "Hesketh's Pills," so labelled, to stamp duty. I am surprised that so little interest appears to be taken in this question. It will be cheaper to give a guinea or two to a fund to fight the question with every hope of gaining it (as indicated by the opinion of Mr. Finlay, which you were good enough to obtain) than to spend five or six pounds on new labels, which, even if they conform to the requirements of the revenue, are inelegant, and calculated to be a source of suspicion to customers. Yours truly,

Edinburgh. PETER BOA.

Incorporated Society of Chemists and Druggists (Limited).

SIR,—I notice in your issue of last week a letter signed by a Mr. Jones, of Birmingham.

I took no notice of the letter in your issue of December 3 last, because the person who wrote it sheltered himself under a *nom de plume*.

For the satisfaction of your correspondent, and those in whose interest he has written, I beg to state that I am the gentleman therein referred to.

The explanation of the matter is very simple. An old friend, a veterinary surgeon, purchased a chemist's business with a large veterinary connection attached from the widow of the late proprietor. He was anxious to keep the veterinary business and sell the chemist's business, and tried for a long time to do so. His solicitor advised him, pending the sale, to register it as a company, so that he might not render himself liable to proceedings. I was asked to sign the memorandum for one share to make up the requisite number to carry out this arrangement.

This is the mare's nest that your correspondent has discovered.

Mr. Jones is not, as far as I am aware, a member o society, so that his gratuitous expression of opinion regard to myself can only be attributed to some inte motive.

With regard to the other portions of his letter I am to see that my fellow-chemists are in such a bad state the sum of 2*l.* 10*s.* 6*d.* has become "a very important n to the trade." Some of them from time to time ha doubt consulted their solicitors, and I should like one c of them to give you the benefit of their experience as t much they have got for 10*s.* 6*d.* (the amount of thei scription to our society), or even for 2*l.* 10*s.* 6*d.*

The probability of paying anything beyond the orc subscription is extremely remote, but the Council advised that it was usual to put in the articles of as tion a right to call for a small sum per annum in ce some extraordinary emergency, and the necessity for t insertion of a provision for payment of a further sum (making a total of 2*l.*), in case the society should be up, is imposed by law. There is no "risk" as to the 10 because that is paid in advance.

I may mention, in passing, that the "self-elected" cillors, as your correspondent sneeringly calls them, nominated by the articles of association of the society.

The deep interest that Mr. Jones appears to take i society must be my excuse for troubling you with thi letter. I am, sir, yours faithfully,

818 Holloway Road, N. J. H. R
March 5.

Morphia-taking.

A case recently came under my notice of the admi tion of morphia in doses of 60 grains repeated twice or a week. The patient was a lady suffering from i cancer, and for her use I supplied a local surgeon with or more of hypodermic solution of morphia of strength. Of this six drachms fluid were injected i operations by a special syringe holding three fluid dr This is, I believe, the largest dose on record. The effe I am told, not very pronounced. T.B.G. (12)

SIR,—In a shop in Edinburgh where I was an as some time ago, we had a customer who got 4 oz. of lau regularly every day, and I was informed that he got a of whisky as regularly every day. He left town ow 5*l.* for laudanum and his spirit merchant 12*l.* for whis

Benbow's Dog Mixture.

SIR,—On page 233 of your issue of February 18 yo lish a "Kelso correspondent's formula" for the abo prietary preparation, and, in the interest of your reade to preserve the reputation of one of the most suc medicines for dogs ever made public, we write to s out of the three ingredients he names two are not em and in the proportion of the third he is hopelessly wr may, perhaps, be pertinent here to inquire what go pose is intended to be served by these successive (if n cessful) attempts to analyse the constituents of re which have been established by years of patient re industry, and expenditure.

Surely it cannot be possible to affront your readers suggestion that they are not capable of originating th preparations, but are compelled to meanly follow attempted analyses of the properties of others.

We are, sir, your obedient servants,
The Proprietors of "BENBOW'S DOG MIXTU

[There is, of course, something to be said on the o side. Proprietors of successful medicines can [hav trade-marks protected, and they can have injunctions people who imitate the shape of their packages or the of their labels. If they have made any real discove can get a monopoly in the manufacture of the artic have invented for fourteen years. But they must not to have the earth. Inquiry into the composition of cessful medicine results from a curiosity as natural fiable as that which induces physicists to analyse t When the medicines become very successful Her publishes formulas for imitations of them in the

Pharma pœia, and the Queen can do no wrong. All the same, v thank proprietors who correct the "guesses at truth" ich we publish, and assure them that their attempts to preve or punish *fraudulent* imitations of their goods will alvys have our sympathy and assistance.—EDITOR *C. & D.*

Linimentum Terebinthinæ.

SIR,—am sorry to trouble you again about lin. terebinth , B.P. 18, but having made several quantities, each time clear, I n informed by some that it should be thick—one saying at-bottomed mortar is required.

Will y u kindly say whether I am wrong or not in turning it out as lear as lin. saponis, and would a little more water than th ordered in the B.P. assist me in producing it accordi to Squire's description? and oblige,

Bloonbury, W.C. MINOR. (260/39.)

[The eal turpentine liniment should resemble hartshorn and oil, t the appearance of the liniment varies with the method manipulation and the nature of the soap employed. If the a unt of water were increased, as "Minor" suggests, it would ave the effect of gelatinising the liniment, not of making creamy, as it should be. The best way to operate is to dis lve the camphor in the oil of turpentine, and add the soa and water. Shake occassionally until the soap is dissolve With 4 oz. of soap and 2 oz. of water, as suggested t Mr. Perry, an excellent liniment is obtained, creamy as to c our and thickness. A sample which was made accordi to this modification last May has not altered in appeara e since.—ED.]

Salts for Rectifying Sour Beer.

SIR,—Iany years ago, in the Midland counties, a man travelle with a preparation which he sold at 2*s.* 6*d.* a packet, and for hich he gave us half-price. It was merely broken up crys s of potass. bicarb., coloured with a little bole. It was not easily recognised as the salt you mentioned last week.

Yours truly,
HEDER.

Cod-liver Oil Emulsion.

SIR,—lease tell me through your correspondence columns, in a co iver oil emulsion, made with egg, will the egg turn bad? it does so, could you tell me the best way to prevent th taking place? My recipe for this emulsion is—

Ol. morrhuæ	6 oz.
Yolk of one egg	
P. gum. tragac.	℥j.
Spt. chloroformi	ʒj.
Saccharin	gr. j.
Ess. cassiæ (1 to 6)	♏ xlviij.
„ amygdalæ (1 to 6)	ʒj.
Glycerini	ʒij.
Aquæ	℥iv.

Yours respectfully,
STORAX. (2/72.)

[Thi mulsion will keep for a long time in closed bottles, owing the presence of the chloroform, glycerine, and spirit. he addition of 5 grains of benzoic acid dissolved in ʒiss. of ectified spirit will remove liability to rancidity.]

Oleum Nigrum—A Caution.

SIR,—If your correspondent *Pasco* has not yet made his oleum grum, he should understand that it is safer to mix the fir three ingredients in an open earthenware jar out of doors. The rape oil modifies the action of the vitriol, yet the res t may be unpleasant and unsafe if a corked-up jar is use

Yours truly,
HEDER.

Chemists and Printing Presses.

Che cus wants to know whether a printing press pays? That ends on whether he, his wife, or apprentice has time to spa ; if there is time it pays very well. I have had an amateur self-inker for the last six months. It pays very well, although we can scarcely afford the time; but it enables us to set up a label for anything we want to try, to set up a little announcement of any new thing to enclose in parcels, and to print a neat show-card for every new thing for the window.

The total cost of press, various types, and etceteras was about 5*l.* When the type is once composed and locked up in the press, the errand boy can do the printing.

It is useful to the chemist who wants to try floating various specialities, and still more to the man who wants to print thousands of any label or bill.

In the case of a stock article of which thousands may be wanted, the type can be stereotyped.

The occupation of composing is very interesting.

CAXTON.

Mr. Hindle, of Gorleston, Great Yarmouth, whose letter appeared in February offering information respecting printing presses for chemists' use, writes to say that the budget of letters he has received in consequence proves that the want of some simple and satisfactory means of executing the many typographical requirements of our business, which would assist in meeting the capricious demands of advertising and at the same time curtail the cost, is keenly felt. He considers the employment of a printing press quite practicable for chemists, and even essential to his business in these days of smart competition.

Cultivation of Medicinal Plants.

SIR,—Having a plot of ground which has grown tired of potatoes, I would feel obliged if any of your readers could give me any practical information as to the "cultivation and manner of securing the crop" of any of the following umbelliferous plants:—Anise, caraway, dill, fennel, and hemlock. Also whether they would be likely to thrive in the North of England. Yours faithfully,

March 3. HOME RULE. (11/39.)

[We published a very useful paper on this subject by Mr. J. R. Jackson, of Kew, in our issue of April 2, 1887, and subsequently several important letters supplementary to that appeared in our columns.—ED. *C. & D.*]

DISPENSING NOTES.

[*The opinions of practical readers are invited on subjects discussed under this heading.*]

A Question of Compatibility.

All ferric salts, with the exception of the scale preparations, are incompatible with the bromides and iodides of the alkalies. Tinct. ferri perchloridi reduces iodide of potassium immediately on mixing solutions, free iodine being precipitated as a black sediment. The following equation explains the reaction:—

$$Fe_2Cl_6 + 2KI = 2FeCl_2 + 2KCl + I_2.$$

The mixture is a most dangerous combination and should never be dispensed.

A similar reduction takes place when syrupus ferri iodidi and tinct. ferri perchlor. are mixed:—

$$Fe_2Cl_6 + FeI_2 = 3FeCl_2 + I_2.$$

WILKAN.

An Emulsion Query.

Put the liq. ammon. fort. diluted with 1 oz. of aq. rosmarini into an 8 oz. bottle, add the almond oil and shake thoroughly, until combined, then dilute with the remainder of the water added ounce by ounce, shaking well after each addition, until up to ℥vj.; lastly, add the tincture diluted with the remainder of the water, giving the whole a good shake. This emulsion begins to separate in two hours, the soap rising to the top, but it is easily diffused again by shaking. The preparation is similar to Erasmus Wilson's hair wash—the aq. rosmarini being replaced by sp. rosma-

rini and aq. mellis. The following is what is generally used in Edinburgh :—

Liq. ammon.	ʒvj.
Ol. amygdal.	℥iss.
Aq. mellis	
Sp. rosmarini, aa. p. e. ad	℥viij.

It is not an emulsion, but is easily mixed on shaking.

WILKAN.

Tolu Balsam in an Ointment.

"Ignoramus" will find that castor-oil exerts on tolu balsam a solvent action of a special character. Some specimens of tolu will dissolve entirely when heated over a flame (using, of course, due discretion) with two parts of castor-oil. On cooling the mixture will be of treacly consistence, and have an opaque orange colour. I once introduced it to the notice of a prominent dermatologist, but nothing came of it. The tolu used in the ointment I send herewith left a residue of one-eighth, which quickly settled on to the basin. The remainder poured off into a cold mortar and then mixed with the vaseline formed the specimen I send herewith. T. B. G. (11/18.)

[The specimen sent is a perfectly smooth ointment, possessing an agreeable odour of tolu. Tolu is undoubtedly a valuable antiseptic, and probably more agreeable in ointment than benzoin. A paper on the subject of toluinated ointments will be found in THE CHEMIST AND DRUGGIST, March 27, 1886, page 220]

Lanolin Ointments.

SIR,—I have always had some little difficulty in making a smooth ointment with lanolin, especially if the lanolin was a month or two old, but at last hit on the following "dodge," which may be of interest to brother-dispensers.

First incorporate a few drops of water with the lanolin, and then mix the other ingredients, finally squeeze through muslin with a stiff spatula. Yours truly,

E. L. R. (12/34.)

[Care should be used in employing this method when pulverulent substances are part of the ointment.]

Codeine and Jambul Pills.

SIR,—What is the best excipient for making the pills according to the subjoined formula? I have tried several, but have never turned out good pills yet.

Codeinæ	gr. j.
Pulv. sem. jambul.	grs. vij.
Ext. cascaræ sagrad.	gr. ¼

Ft. pil. ij., mitte xl.

Yours truly,

FUCUS. (11/27.)

Lanolin and Lin. Potassii Iodidi.

SIR,—How should the following prescription be prepared? and what should be the colour, &c., of the product?

Lin. pot. iodid. c. sapone	ʒj.
Lanolin.	℥j.

Ft. ung.

APPRENTICE. (7/49.)

Blaud's Pills.

SIR,—What is the best method for making up the following?—

Ferri sulph.	grs. iiss.
Potass. bicarb.	,, iiss.

Ft. pilula. Mitte tales 96.

Yours truly,

S. W. H. (9/31.)

[Bicarbonate of potash should not be used in this case, as carbonic acid gas is set free and makes a large pill, especially if tragacanth is used as an excipient. For each five grains of bicarbonate use three grains of carbonate of potash and make into pills as directed in the Unofficial Formulary.]

A Liniment Query.

SIR,—Can any of your correspondents inform me th manner in which the following should be sent out?—

Sulph. præcip.	ʒj.
Potas. carb.	ʒj.
Glycerini	ʒj.
Etheris sulph.	ʒj.
Sp. vini rect.	ʒj.

M. M. d. ut.

Yours truly,

A. S. (6)

[Add half an ounce of the spirit to the glyceri rub up the powders with this in a mortar, transfe stoppered bottle, and add the remainder of the spirit a ether with brisk shaking. Should be labelled "sha bottle."]

LEGAL QUERIES.

10/30. *Inquirer.*—For a "wine dealer's" licence justice's certificate is not required; but it is necessary "wine retailer's" licence. You should apply to you excise officer for either, and for other information con them.

9/10. *J. T. H.*—Any registered chemist may ribe himself as a homœopathic chemist if he chooses to d .

12/43. *Æsculapius* asks whether a surgeon or L can keep an open shop for the dispensing and vending of and whether he can style himself chemist and d gist. He can do both. The first section of the Pharma Act, 1869, says, "Nothing contained in the first fifteen sec of the recited [1868] Act shall affect any person who h been registered as a legally-qualified practitioner before the of this Act; and the said clauses shall not apply person who may hereafter be registered as a legally-q ified practitioner; and who, in order to obtain his diplo for such registration, shall have passed an examination pharmacy."

Mr. Brooker, of Hastings, sends us a lengthy co pondence he has had with the Board of Inland Rev e in reference to certain preparations of his which he was id to have sold "not duly stamped," and for the sale of w h he was in each case liable to a penalty of 10*l.* under the cond section of the Medicine Stamp Act (see page 160 THE CHEMISTS' AND DRUGGISTS' DIARY, 1888). Mr. Brooke as in the habit of gumming his stamps on the handbills other wrappers which surrounded the vessels containing th medicines liable to duty. The Board decided not to tute proceedings on this occasion, but cautioned Mr. Br er to affix the stamp in such a manner in future that the cket, box, bottle, pot, or other enclosure cannot be ope and the contents poured out or taken therefrom without aring the label.

W. Hindle. You cannot use a still of any kind thout taking out a 10*s.* annual licence. Have you not d Dr. Symes's remarks on Bracher's still in last week's CHEMIST AND DRUGGIST?

11/59.—*T. T.* asks if a person can legally make article like one that has been patented if for his own use , and not offered or intended for sale?

[We will put the question ourselves in a slightly ferent form. If "T. T." were to invent a new steam-engi would he think it fair that the London & North-Western ilway Company should make one or fifty for their own us nly, if they did not offer them or intend to offer them for s ? The general rule of law is that a person may construct a tented machine as a model, or for amusement, or for the p pose of *bonâ-fide* experiments, without rendering himself le for infringement. If, on the other hand, he uses it for e purpose of profit, however small the profit may be, t such user renders him liable.]

11/1 *Nemo* finds someone has applied for registration of a ti corresponding, with the exception of one letter, to a fancy e he has used for years. What should he do? [The differe of the one letter in the spelling is of no consequen. If you think the property in your title is worth keepin you should first write to the applicants for the simila ne, and you may agree (though it does not follow that t Registrar will consent) for both marks to be registered. ut if you wish to prevent their registration of the mark t proper course to adopt is to give notice of opposition w in two months of the date when the advertisement of the al preparation first appeared in the *Trade Marks Journ* If the other trade-mark is registered the owner will be ntitled to restrain you from using yours until such time a you have applied to have the register rectified by strikin off his mark, which would be an expensive business, and m t be refused on the ground that you allowed registration take place without taking any steps to oppose it.]

8/31 *Subscriber*, who left certain premises in November, 1887, ing paid rates up to March, 1888, asks if he can compe nother tenant who has replaced him to pay him his propor n of these rates. [The case of a tenant who takes possessio n the middle of a half-year for which another tenant has pa the rates and taxes appears to be similar to the case of a p chaser under the same circumstances. After the comple on of the purchase the vendor, in the absence of expres greement, could not recover from the purchaser any rates c axes he might have paid in advance.]

MISCELLANEOUS INQUIRIES.

A larg number of correspondents ask us for formulæ which ha already been published in this journal. It is not fai to more careful readers that we should frequently rep t such information, and so long as the back numbers co ining the formulæ, or replies required, are in print we ust decline to do so. Back numbers from March 1886 *on rd can be obtained from the publisher at 4d. each.*

Ani e Marking-ink (in two bottles). — Formula in *C. & D.* November 26, 1887, page 690.

Ink Cheap Writing).—The formula was given on Jan. 14, 1888, ge 58, and on page 61 of the same issue there is a formu for ink for indiarubber endorsing stamps (9/61. *J. D.*, Genev.).

Con dones (or Blackheads).—We last answered a question on thi ubject in our issue of January 28, page 143 (11/174. *L. R.*).

8/9. *Otto Virg.*—For weights of otto of rose see reply to "Ajax January 7, 1888, page 30.

Spi Gum for Moustaches.—See November 26, 1887, page 6). (12/27. *Tenax.* References to your other requirements ere given last week. See also page 234 for **Transparen Hair Dye**)

Co ing Ink is made by adding a proper proportion ($\frac{1}{2}$ oz. or so the pint) of sugar or gum arabic to a writing ink. We gi a formula on page 176 of the current volume, and anoth good formula on page 582, November 5, 1887, as well as oth s in last volume. (*Staffs.*)

Books.

8/3 *F. M.*—The best work that you can have is Dr. Laud Brunton's "Materia Medica and Therapeutics" (Macmilla 21*s.*). Ringer's "Therapeutics" is also a good work, but t es no cognisance of pharmacognosy.

5/2 *E. W.*—We cannot undertake the analysis of cattle foods ratuitously, and for that reason we can only say of the s ple of **Calf Meal** which you send that its appearance leads s to suppose that it has the ordinary composition, viz., linse, wheaten flour, and barley meal, the linseed being in the f n of the ground cake.

5/29. *Johannes.*—You will get particulars about membership of the Society of Chemical Industry from the secretary, 9 Bridge Street, Westminster, S.W. Membership does not imply any qualification; the annual subscription is 25*s.*

7/3. *J. S.*—If you will refer to last Diary you will find advertisements of some wine merchants, who will give you better advice respecting the brands of champagne than we can give.

4/49. *Argentum.*—The **Hair-dye Developer** which you send is undoubtedly a solution of pyrogallic acid. It changes a solution of nitrate of silver at once, and reacts with alkalies and with ferrous sulphate as pyrogallic acid should.

3/40. *J. L.*—The **Bronchitis Pills** which you send are apparently *pil. scillæ co.*, and the **Pills for Rheumatism**, sciatica, &c., owe their virtues to aloes and colchicum. A similar pill may be made from the following formula:—

Barbadoes aloes	3ss.
Powdered colchicum corm	gr. xij.
Powdered liquorice	gr. viij.
Oil of peppermint	gtt. ij.

Make a mass with water, and divide into 12 pills.

Dose: One at bedtime.

4/63. *Talc* sends a sample of "**Precipitated Fuller's Earth,**" which is put up in boxes containing about 5 oz., and retails at 6*d.* It is a light grey powder, consisting of almost pure silicate of alumina. It is, in fact, ordinary fuller's earth, from which the iron has been removed by means of hydrochloric acid.

4/31. *J. J. W.*—The colouring-matters sent are coal-tar colours of the Magdala red type. Any colour merchant will match them for you.

6/73. *Viridis.*—The amount of insoluble matter in **Ext. Ipecacuanhæ Acet.** varies considerably. Some samples do not contain much more than 8 per cent., while others have as high a percentage as 38. Your sample, containing 62 5 per cent., is abnormal. The simplest way to estimate the amount of emetine in the extract is to digest a weighed portion of it, say 100 grs., in ammoniated chloroform. Filter, evaporate, and dissolve the residue in dilute acetic acid, again filter, add ammonia in slight excess, extract with chloroform, evaporate, and weigh. For ordinary comparative purposes the purification may be dispensed with.

8/7. **Delta.**—*Chilblain Cerate.*—Spermaceti, 3 oz.; yellow wax, 6 oz.; olive oil, 14 oz. Melt, strain, and add tincture of arnica $2\frac{1}{2}$ oz. Stir constantly till cold. A little camphor may be added, and the cerate may be perfumed with thymol. For unbroken chilblains omit the arnica.

11/58 *J. A. C.*—**Linimentum Plumbi Lactatis Compositum** (Wilson) is a proprietary preparation of which we do not have the formula.

11/63. *P. J. R.* wishes to know the method of polishing and smoothing the surface of labels that have been coated with a film of hard paraffin.

11/74. *L. & Co.*—You will find another method of making oleaceous butter-colouring from roll annatto in vol. xxx., page 248, but it is more troublesome than the one in which seeds are used. You may increase the quantity of seeds in order to get the desired colour.

11/31. *Northern Owl.*—**Liquor Potassæ from Caustic Potash.**—The official caustic potash should contain 90 per

cent. of potash (KHO), and, according to the Pharmacopœia, one fluid ounce of liquor potassæ contains 27 grains of hydrate of potassium, or 27 × $\frac{10}{9}$ = 30 grains of B.P. caustic potash.

7/53. *Enquirer.*—The degree of Ph.D. is conferred by all the German universities, but cannot be taken now, as it formerly could be obtained, by candidates *in absentiâ*. Candidates must go through a three years' course of study and must then do some original work in the laboratory, generally occupying another year. An examination in chemistry, philosophy, and one other subject (physics is generally taken by the chemical candidates) follows, and after that the candidate is called upon to defend the thesis which he has written narrating the result of his laboratory work. Lastly, he pays a formal fee of about 7*l.* 10*s.* and takes his degree. He is not required to spend the whole of his time at one university. There are occasionally some American degrees on the market, but we have not heard fiom any of the dealers in these lately.

9/34. *Astragalus.*—The percentage of marks required for a pass in all the pharmaceutical examinations is 50, over the whole of the subjects, with a smaller percentage as a "pass" in individual subjects. It really does not matter to the candidate, however, what the percentage may be; for although he were in the Minor to answer one half of the questions correctly and the other half incorrectly, he would not get 50 per cent. of the maximum number of marks, but would in all likelihood be sent back to his studies for three months. What the examiners have to consider is whether a man is safe to pass or not. For that reason, if you are devoid of the sense of smell, you must by means of other facilities show acquaintance with drugs and their preparations.

173/18. *B. J. E.*—The hard drying paints are made by using a considerable excess of the drying materials, such as lead acetate and zinc sulphate, either as such, or in the form of one or other of the patent dryers which are now so commonly used by painters.

Further in reply to *Yorik* (1/74) "T. B. G." writes:—The ingredients are all solids. Vol. *salt* of hartshorn is ammon. carb.; vol. salt of amber is ammon. succinat., which used to be obtained as a by-product in destructively distilling amber. I have somewhere a very old specimen.

Artificial Musk (4/23) is one of the very old preparations rarely to be seen except on the shelves of the older pharmacies. It was made by treating ol. succini with strong nitric acid. It is mentioned by Beasley, by Gray, and others. T. B. G.

It is possible that "Tincture of Artificial Musk" is meant, which is a preparation made with acid nitric and ol. succini, and diluted with spirit. I recollect making and selling it when an assistant, but have no record of formula.

W. B. (12/57.)

7/23. *Dispenser.*—The following is said to be a good **Cement for Indiarubber**:—

Guttapercha	½ oz.
Indiarubber	1 „
Isinglass	¼ „
Bisulphide of carbon	4 „

Dissolve, coat the parts, dry, then heat the layer to melting, place and press the parts together.

9/36. *Sanguinarin.*—**Epistaxis, or Bleeding from the Nose**, is common to the healthy and the weak; with the former it frequently is a sign of a sluggish liver, and the administration of an aperient often prevents a recurrence of the attack. Hazeline is an excellent remedy applied locally, so also are most astringents. Dr. Lavrand speaks highly of an aqueous solution of antipyrin (1 in 30) applied on lint as a tampon for the nostrils. In all cases cold should be applied to the nose and to the nape of the neck (the old-fashioned remedy, a cold door-key, is as good as anything for the latter purpose). Hoblyn's Dictionary, which we recently reviewed, gives all information regarding scientific terms.

9/33. *J. H. B.*—**Dec. Aloes Co. Cone. (1 to 4).**—Take extract of Socotrine aloes, 2 oz.; myrrh, saffron, and carbonate of potash, of each, 1 oz.; extract of liquorice, 8 oz.; and the solid ingredients for 3 pints of compound tincture of cardamoms. Digest the aloes, myrrh, carbonate of potash, and the liquorice in a pint of hot water for two hours; then allow to cool, add the other ingredients, and a pint of rectified spirit. Macerate for seven days, press, and filter, making up the product to 50 oz. with proof spirit.

7/16. *Tom Tom.*—(1) A mixture of bay salt and quicklime is a good application for destroying **Weeds in Garden Paths.** (2) The most effectual local anæsthetic is cocaine hydrochlorate. A 20-per-cent. solution of this would be suitable for applying to a dog's ear before it is incised. A few minims of the solution should also be injected subcutaneously.

11/13. *A. P. S.*—Olive oil is bleached by exposing it to light, or by shaking with a twentieth of its volume of 10-per-cent. solution of permanganate of potash, to which a little sulphuric acid has been added, afterwards separating and filtering the oil. The latter method may be tried with mineral oils, but these are generally bleached by treating with sulphuric acid alone (2 per cent.), and repeated filtration through animal charcoal.

12/42. *Arbeitsam.*—**Essence for Ginger Ale**:—

Essence of vanilla	ʒj.
Soluble essence of lemon	℥ss.
Tincture of capsicum	℥ss.
Essence of pineapple	♏x.
Caramel	q.s.
Soluble essence of ginger, to	℥xx.

Mix.

12/21. *T.*—We do not have working formulæ for liquor for syrups of poppies, buckthorn, and rhubarb **Liquor fo Parrish's Syrup**:—

Polished iron wire	300 grains
Phosphoric acid, s.g. 1,500	8 oz.
Distilled water	5 „

Mix the water and acid and dissolve the iron wire in the mixture applying a gentle heat; filter through calico into a solution made follows:—

Precipitated chalk	970 grains
Carbonate of potash	72 „
Phosphate of soda	72 „
Phosphoric acid, s.g. 1·500	4 oz.
Cochineal colouring	q.s.
Orange flower water	4 oz.
Water	q.s.

Dissolve the chalk in the acid and 10 oz. of water, add the soda potash salts, the orange flower water, and sufficient cochineal to colo then filter and wash the filtrate with water until 27 oz. of filtrate obtained.

This makes a "1 in 4" liquor, but by a suitable reducti of the water and careful manipulation the product may made to measure 1 pint instead of two, thus giving a 1 t preparation.

9/49. *Spes.*—We do not know of any book of experime with alcohol suitable for temperance lectures. You sho communicate with a temperance orator. There should be difficulty for an assistant in passing the Apothecaries' I examination by careful home-study.

13/13. *Extra Vacation* would like to hear from otl what they have found the most speedy treatment for a bl eye.

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WITH VITRIFIED (burnt in) LABELS

(Black Letters on a ground of Pink or White Enamel).

Labels indestructible and of elegant appearance, forming an even surface with the glass or porcelain. The Jars of best porcelain, thoroughly greaseproof. The Bottles hand-made and of superior quality. Both are unsurpassed by anything in the market in every respect. Also a CHEAPER sort of Bottles and Jars, with labels equally indestructible, but very plain, especially suitable for Dispensaries, &c. Intending Buyers are requested to inspect Samples at

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4 CREECHURCH LANE, LEADENHALL STREET, E.C. (late of Sugarloaf Court)

A large number of Shops have been fitted up with these Bottles and Jars, both in England and the Colonies, a list of which can be had on application.

LATEST NOVELTIES:

POISON BOTTLES of Ribbed Blue Glass, with RAISED White Vitrified Letters, and the Word "POISON" in Red at foot.
DRAWER LABELS of Crystal Glass, with Bevelled edges and Vitrified Labels to match the above Bottles and Jars.
STANDARD LIST OF LABELS for Chemists' Shop Bottles, Jars, and Drawers will be sent free on application.

Stock of small sets always on hand. TELEGRAPHIC ADDRESS: "POTHS LONDON." *See our Advertisement page.*

PURE OXIDE OF ZINC (HARRIS'S)

SPECIALLY PREPARED FOR PHARMACEUTICAL PURPOSES.

PHILIP HARRIS & CO., LIM., Manufacturing Wholesale and Export Chemists, **BIRMINGHAM.**

CRYSTAL PALACE BOND'S GOLD MEDAL MARKING INK
29 PRIZE MEDALS & OTHER AWARDS
PRESENTED GRATIS TO EVERY PURCHASER OF A 1/- BOTTLE
A ROYAL LINEN MARKER IN A CASE
TWO SETS OF INDIA RUBBER ALPHABETICAL LETTERS, PAD & HOLDER
CAUTION!! THE GENUINE LABEL HAS THE WORDS, PREPARED BY THE DAUGHTER OF THE LATE JOHN BOND. (SEE YOU GET IT.)

PRESENTED GRATIS!!!

A FAMILY OUTFIT OF RUBBER TYPE,

Consisting of Two Sets of India Rubber Alphabetical Letters, Pad, and Mahogany Type Holder, with every 1/- Bottle. Order Sample dozen. We guarantee quick sale and repeat order.

Works: 75 SOUTHGATE ROAD, N.

WRIGHT

FINEST NORWEGIAN COD LIVER OIL

SEASON 1888.

GUARANTEED NON-CONGEALING AT 32° FAHR.

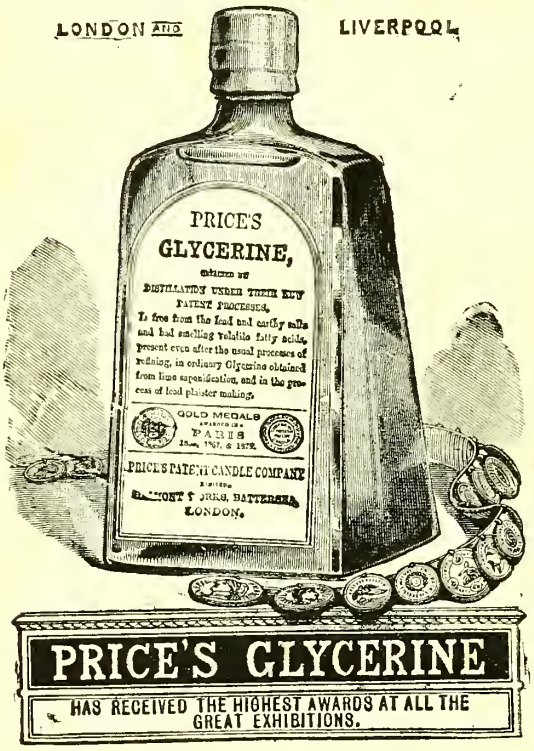
LAYMAN

In Winchester Quarts, at per gallon	... ...	6/0 net.
In quantity of 6 W. Qts. ,,	... ...	5/9 ,,
,, ,, 12 W. Qts. ,,	... ...	5/6 ,,
,, ,, 25 Gallons {Tin-lined Casks (free)}	... ...	5/0 ,,

Special Quotations for larger quantities on application.

SOUTHWARK, LONDON. **UMNEY**

PRICE'S PATENT CANDLE COMPANY LIMITED
LONDON AND LIVERPOOL



PRICE'S GLYCERINE
HAS RECEIVED THE HIGHEST AWARDS AT ALL THE GREAT EXHIBITIONS.

A lovely BATH and Toilet Water will be obtained by using

This entirely new and excellent health-giving preparation *SOFTENS the WATER*, and gives it a most

DELICIOUS ODOUR.

PASTA MACK

BEAUTIFIES THE COMPLEXION

In a most extraordinary way.

Should be in every Bathroom and Bedroom.

To be had of all respectable Chemists and Perfumers throughout the world.

Sole Manufacturer and Inventor, **H. MACK**, Ulm a/D.

FREE SAMPLES GIVEN AWAY WITH EVERY TRIAL ORDER.

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PARFUMERIES DE SEILLANS

(VAR, FRANCE).

Flower Pomades. Perfumed Oils. Flower Extracts.
Essential Oils. Distilled Waters, &c., &c.

Of all Wholesale Druggists, or WHOLESALE ONLY of

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KIZANLIK, BULGARIA.

VIRGIN OTTO ONLY DEALT IN.

REPRESENTED IN ENGLAND BY

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28

GREENSILL'S THE ORIGINA

When ordering from **MONA** AND ONLY GENUINE

Wholesale Houses please specify "*GREENSILL'S.*" **BOUQUET**

SOLE MANUFACTURERS—

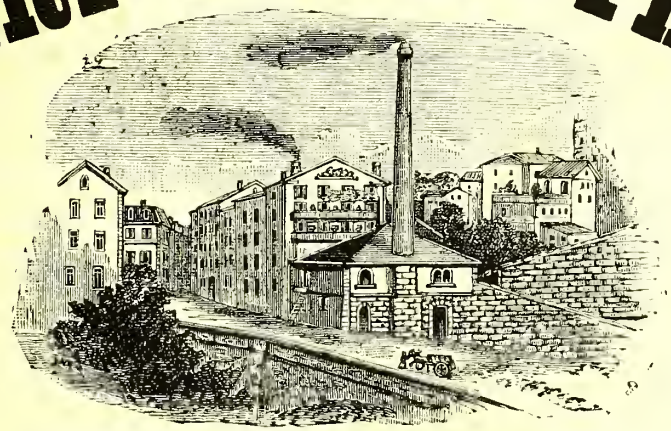
T. S. GREENSILL & SO

LOCH PARADE,

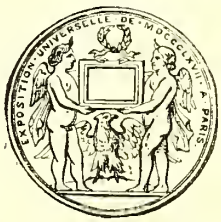
DOUGLAS, ISLE OF MAN.

WARRICK BROTHERS

AIX, 1869.



View of the Factory at Grasse, Alpes Maritimes, France.



PARIS, 1867.

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RAW MATERIALS FOR PERFUMERY

AND FOR

MEDICATED AND HIGH-CLASS CONFECTIONERY.

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FOR

ESSENTIAL OILS, FRENCH POMADE, FRENCH EXTRACTS, FRENCH WATERS, &c.

JUJUBES AND MEDICATED LOZENGES.

NEVER was ſuch a Label
ſeen,
Read of in books, or dreamt
of in dreams,

AS THAT AFFIXED TO THEIR

1888 NOVELTY.

(*Which nobody can deny.—Ed. C. & D.*)

1 lb. SAMPLE SENT FREE FOR
40 PENNY STAMPS.

The Most Extensive Peppermint Works in the World. Estab. A.D. 1869. Expositions Internationales Grand Prize Medals.

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CRYSTAL WHITE OIL TRUE PEPPERMINT

Double Distilled, Distilled and Refined by Steam.

This quality is now offered through the leading Wholesalers of Great Britain at Special Introductory Prices, in sealed and guaranteed Bottles of 500 grams, 1 lb., 8 oz., and 4 oz., and 20 lb. Tins.

The Manufacturer POSITIVELY GUARANTEES it not only ABSOLUTELY PURE and IN EVERY RESPECT THE HIGHEST QUALITY MANUFACTURED, but also the MOST PROFITABLE in use—less being required, whilst the highest possible result are uniformly and quickly obtained.

PLEASE SPECIFY "A. M. TODD'S CRYSTAL WHITE" IN YOUR NEXT ORDER.

Notice its *unequalled purity, strength, aroma, solubility,* and *entire perfection of manufacture.* The benefit derived from your trial will be reciprocal and permanent. SEE LARGER ADVERTISEMENT IN NEXT ISSUE.

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Specially dedicated to the introduction of **Pharmaceutical Preparations, Surgical Aids and Appliances, &c.,** in the propagation and sale of which they possess special facilities, owing to their extensive connection amongst the buyers, and the fact of their being personally acquainted with the great majority of the Medical Profession of this and the adjoining Republics, whom they canvass periodically.

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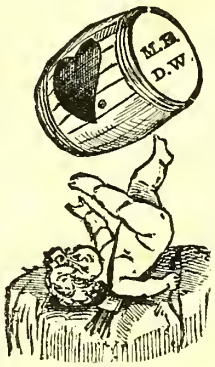
The Mormon Elder's

DAMIANA WAFERS



THE MOST POWERFUL
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Permanently restores those weakened by early indiscretions, imparts youthful vigor, restores vitality, strengthens and invigorates the BRAIN AND NERVES. A positive cure for IMPOTENCY and Nervous Debility. *Prompt, Safe, and Sure.* 4/6 per box, 6 for 22/6. Usual discount to the Trade. Send for Circular.

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Hovenden & Son, Sanger & Son, Barclay & Sons, Edwards & Son, and all Wholesale Druggists.

GENUINE EAST INDIA MUSTARD SEED OIL

GUARANTEED ABSOLUTELY PURE AND UNADULTERATED.

The ordinary 1/- size, 50/- a gross; also an extra large size, to be retailed at 2/-, at 90/- a gross, leaving a good margin of profit to the retailer. As it is now universally being advertised, there is setting in an increased public demand.

IMPORTANT CONCESSION!!!—Note: On all first orders for an original case of each size, an extension of credit of six months will be afforded, thus enabling the retailer to secure all the benefit of selling every bottle before paying a single shilling out of his own pocket.

Artistic Window Tablets, Stationery, &c. with each order.

CERTIFICATE OF ANALYSIS.

"I hereby certify that this is a genuine unmixed Mustard Seed Oil.—(Signed) A. NORMAN TATE, F.I.C., F.C.S., Liverpool, August 8, 1887."

NEW AMERICAN OIL OF PEPPERMINT, NOT deprived of its Menthol, 10*s.* 6*d.* per lb. In original 22-oz. bottles. Packages free. If order is accompanied by P.O.O. for 15*s.* an original sample bottle of the Mint will be forwarded, carriage paid, per Parcels Express, TO ANY PART OF THE WORLD.

CHILIAN HONEY—½-cwt. tins, 3*d.* per lb.

Non-freezing, Finest Norwegian COD-LIVER OIL, guaranteed premier quality; 25-gallon tin-lined barrels for £5, or in 4½-gallon tins at 4*s.* 6*d.* per gallon.

DRUGGIST'S WHITE GLYCERINE, 12·60—9*d.* per lb., 60-lb. tins (expected to be dearer).

ESS. LEMON (NEW)—4*s.* 6*d.*, 10-lb. tins.

DALMATIAN INSECT POWDER in Original 28-lb. tins at 1*s.* 2*d.* per lb.

P. RHEI, E.I. ELECT.—7-lb. bottles, 3*s.* per lb.

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CIRCASSIAN OIL—40-gallon barrel, bright and clear as

COLZA OIL—1*s.* 6*d.* per gallon (for Hair Oil, &c.); sample 9-gallon tin, for 15*s.*

Special—PETRO. JELLY (firmer than VASELINE)—4*d.* per lb., 40-lb. tins.

GRANULAR EFFERVESCENT CITRATE OF MAGNESIA—at 8*d.* per lb., for not less than 28 lbs.

PURE CRYSTAL MENTHOL CONES, MOUNTED neat turned-wood boxes for the pocket. 1 *gross sent free, per Parcels Express,* TO ANY PART OF THE WORLD on receipt of P.O.O. for 21*s.*; *id est*—144 sixpenny size delivered free at 1¾*d.* each.

NOTE.—All PACKAGES FREE, and delivered to RAILS FREE.

GOOD MERCHANTABLE QUALITY GUARANTEED.

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ESSENTIAL OILS.

Packed in Original 1-lb. Bottles.

Ol. Anisi Ang.
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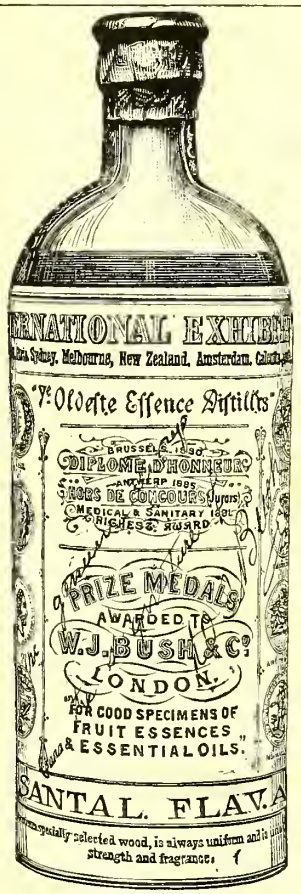
Ol. Juniperi Ang.
Ol. Menthæ Pip. Ang.



Ol. Myristicæ Ang.
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ALL OWN DRAWING.

Ol. Bergamot, Extra
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DIRECT IMPORTATION.

Specially Selected.

It is imperative that Chemists and others requiring Essential Oils for medicinal purposes should purchase genuine and finest qualities only. These can only be obtained from W. J. BUSH & CO., who supply them as above, in 1-lb. Bottles, and guarantee their quality and purity. *Nearly all Essential Oils offered in the Market are impure.*

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[1]

MANUFACTURING CHEMISTS, DRAWERS OF ENGLISH ESSENTIAL OILS,

ARTILLERY LANE, LONDON. Works—ASH GROVE, HACKNEY.

WYLEYS' GELATINE COATED OVAL PILLS

The only Gelatine Coated Oval Pills of ENGLISH MANUFACTURE in the Market. Special List on application.

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Bismuth. Pepsin. Co. (Wyleys'), ℞ Bismuth, Nit., 2 gr.; Pepsin Porci, 1 gr.; Ferr. Redact., 1 gr.; Strychnin, $\frac{1}{24}$ gr. 3/6

Calcii Sulphid. $\frac{1}{10}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1 gr. 1/8

Cascara Sagrada (Ext.), 2 gr. 2/-

Ergotin. Comp. ℞ Ergotin, 1 gr.; Ferri Sulph. Exsic., 1 gr.; Ext. Hellebor., 1 gr.; Ol. Sabinæ $\frac{1}{2}$ m.; Ext. Aloes Soc., 1 gr.... ... ... 3/-

Gross Botts.

Ferri Hypophosph. Comp. (Wyleys'). Each pill represents 1 fluid drachm of Syrup of the Hypophosphites... ... ... 2/6

Ferruginous (Bland's), 3 and 5 gr 1/8

Ferri Quininæ et Strychninæ Phosph. (Wyleys'), representing Easton's Syrup ... 3/-

Gross B

Hydrarg. et Arsen. Iodid. (Wyleys'). Each pill equivalent to 5 minims of Donovan's Solution ... ...

Manganese Binoxidur., 1 gr.

Phosphorus, $\frac{1}{50}$ E. Nuc. **Vom.,** $\frac{1}{4}$ gr. ... ...

Podophyllin Resin, gr.; **Pil. Rhei Co.,** 4 gr. ... ...

Potass. Permang., gr., 2 gr.

WYLEYS & CO., COVENTRY.

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STANDARDIZED AND GUARANTEED DRUGS AND PREPARATIONS F HOME AND EXPORT TRADE.

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REGISTERED ADDRESS FOR TELEGRAMS—"EDULCINE LONDON."

Jensen's

COD LIVER OIL

The only Oil in the World guaranteed as solely from perfectly fresh Livers, and therefore and pleasant to taste and smell. Guaranteed congealable, and not liable to repeat.

ICEBERG BRAND,

In bottles only, to retail at 1s., 2s., 3s 6d., & 6s

Norwegian Oil in bulk, supplied in Original Barrels or in Winchesters, at prices according to quality quantity, to retail under Chemist's own name.

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"FOR THE BLOOD IS THE LIFE."

CLARKE'S

WORLD FAMED

BLOOD MIXTURE

The Great BLOOD PURIFIER and RESTORER.

(Registered Trade Mark—"BLOOD MIXTURE.")

The Celebrated CURE FOR Scrofula, Scurvy, Blood and Skin Diseases, and Sores of all kind

Wholesale of all the Wholesale Houses. Net Wholesale Price, 23/- per doz. Usual terms.

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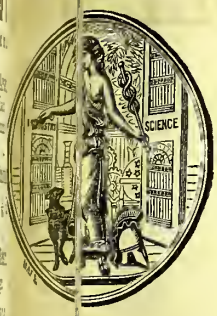
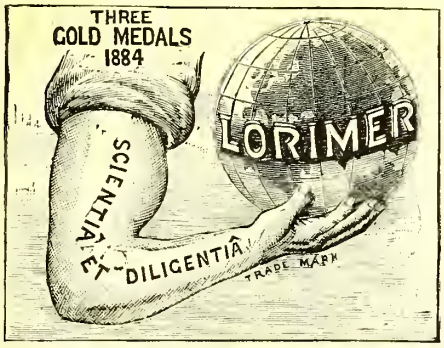
Gold Medal, London.





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Citrate of Iron and Quinine, Granular Effervescent Citrate of Magnesia, Flavouring Essences, Parrish's Syrup, Syrup of the Hypophosphites (Lorimer), Quinine, and Coca Wine Medicated Lozenges, Lime Juice Cordials Pearl, Sugar, and Gelatine Coated Pills Extract of Malt, Ketchups, Sauces, Jellies, &c.

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HAS THE LARGEST SALE OF ANY COUGH MEDICIN

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SINGLETON'S
GOLDEN EYE OINTMENT. GD.

KNOWN TO THE PUBLIC UPWARDS OF 250 YEARS AS A CERTAIN CURE FOR

INFLAMED EYES, WEAK SIGHT, SORE EYES, SCORBUTIC ERUPTIONS, PILES, BRUISES, E .

Dr. BABINGTON recommended the use of SINGLETON'S GOLDEN EYE OINTMENT in the most virulent cases of inflammation, an dd "NOTHING ELSE WOULD BE OF USE."

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DR. JOHN HOOPER'S PILL ,

Which may be known by the Name of the Inventor being on the Government St ap

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AMERICAN BUYERS are particularly Cautioned !

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The Only GOLD MED L
For British Exhibitors was awarded to

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10 & 11 NORTH CHURCH SIDE, H L.
Importer of Norwegian, Newfoundland, & other va ies.

Low Quotations on application. Delivered at London or Liverpool.

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Finest French and English Drawn Essential Oils.—Insect Powder, guaranteed from closed flowers (Nine Prize Med).—Fruit Essences.—Ethers.—Rose, Orange, and Elder Flower Waters.—Triple Extraits and Pomades.—Gums of all k s.—Hypophosphites—and all other Chemicals.

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SULPHATE OF QUININE

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QUININE FACTORY AUERBACH

(DR. SEYFERTH).

Certified by Professor Fresenius, of Wiesbaden, as equal to the best preparations of other marks.

DEUTSCHE GOLD AND SILBER SCHEIDE ANSTALT

(VORMALS RÖSSLER),

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CYANIDE OF POTASSIUM,
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NITRATE OF SILVER,
CHLORIDE OF GOLD,
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IRON Reduced by HYDROGEN,
TARTARIC ACID,
HYDROCHINON,
STRONTIA,
MAGNESIA, and ALL OTHER CHEMICALS for PHOTOGRAPHIC and PHARMACEUTICAL PURPOSES, of the Best Quality.

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EFFERVESCING.

This preparation is a mixture, in definite proportions, of Howard's Chlorate of Potash, English Tartaric Acid, Bicarbonate of Soda, and a little Cane Sugar. The proportion of these ingredients is fixed, and always remains the same. This, and the pleasant excess of acid, characterise Evans' Saline. A dry, mobile powder, dissolving perfectly.

Bottles with Chemists' Own Name, or in Bulk.

New artistic designs for wrappers for the season.

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EVANS' OL. RICINI SINE SAPORE

(TASTELESS).

This Castor Oil is *expressly and solely* manufactured for us. It is produced by a process which removes the taste, though not the efficacious properties.

In W. Quarts, Tins, or Bottles with special Label.

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HOP BITTERS COMPANY

(LIMITED)

Have introduced a 2/6 size Bottle, which is in great demand.

Send to your Wholesale Dealer for price, and put in Stock.

RETAIL PRICES in FUTURE,

2s. 6d. & 4s. 6d.

35

COMPOSITION ESSENCE.

PRIZE MEDAL

HEALTH EXHIBITION.

This Genuine Essence of Composition will be found superior, both in Medicinal Properties and Aromatic Flavour, to that generally sold.

Owing to the great and increasing demand for this Article, Chemists will find it a PROFITABLE ADDITION TO THEIR STOCK.

Registered Trade Mark.

TRADE PRICES :—

In 6d. & 1s. Bottles with attractive colored label, (Winged Lion Brand without our name,) 3s. 6d. & 6s. per oz.

SHOW CARDS SUPPLIED.

IN BULK, PER LB. 1s. 3d.; WINCHESTER QUART 5s.

5°/o DISCOUNT.

EXPORT QUALITY--SPECIAL STRENGTH per lb. 1s. 6d.; WINCHESTER QUART 1s 6d.

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THE OLDEST AND MOST SUCCESSFUL.

1 doz. mounted on a handsome Illustrated Show Card, Retail, 6d. each; Wholesale, 3s. 6d. per doz. It is especially adapted for Export Trade and may be safely sent to the hottest climates, as each glass tube is hermetically sealed and enclosed in a cardboard case, with full directions for use.
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ROBERT GIBSON & SONS,

MANUFACTURERS OF HIGH-CLASS LOZENGES OF EVERY DESCRIPTION,

JUJUBES, BOILED SUGARS, COMPRESSED PELLETS, &c., &c.

Shipped through London Houses to all parts of the World. Price Lists sent on application to the Works,

ERSKINE STREET, HULME, MANCHESTER ENGLAND.

LONDON DEPOT—1 AUSTRALIAN AVENUE.

THE NEW DIETETIC EFFERVESCING

KEF. **MILK DRINK.** KEF.

The most easily assimilated Food in Wasting Diseases.

PREPARED AND DELIVERED DAILY BY THE SOLE MANUFACTURERS,

TRADE MARK: BEBE **SPRING & CO., 21 Blenheim Road, N.W.** TRADE MARK: BEBE

GOVERNMENT DISINFECTANT

CARBOLIC POWDER (PINK) in 1 Cwt. 2 Cwt. CASKS 1lb & ½ Packages

CARBOLIC POWDER (PINK, in TINS 6d & 1/- | CARBOLIC SOAP No. 1 & No. 2

CARBOLIC FLUID in 6d 1/ & 1/6 STOPPERED BOTTLES | CARBOLIC & GLYCERINE SOAP in ¼ TABS

FREE FROM POISON AGREEABLE IN SMELL. THE GOVERNMENT SANITARY Co., LONDON E. TO BE HAD FROM ALL WHOLESALE DRUGGISTS

NOTICE.

There is absolutely no Acid or Alkali used in the manufacture of

PETROLINA.

PETROLINA

Is a pure product of Petroleum deodorised by the action of superheated Steam and Air, and decolorised by filtration through Bone Charcoal.

NEVERTHELESS,

PETROLINA is as Cheap as any of the inferior Jellies produced by the less expensive and highly deleterious Acid process.

THEREFORE,

BUY THE BEST,

When it is also

THE CHEAPEST.

Packed in Oak Kegs of 112 lbs., 56 lbs., or 28 lbs., and in the Patent Self-opening Tins containing 5 lbs., or 1 lb.

SAMPLES, PRICE LIST, AND FORMULE FREE.

ORDER PETROLINA THROUGH ANY WHOLESALE DRUGGIST OR DRYSALTER.

E. A. DE PASS & CO., 3 Coleman Street, London, E.C., **SOLE AGENTS.**

PUMILINE.

THE ONLY PURE ESSENCE AND EXTRACT OF SNOW-GROWN PUMILIO PINES.

FOR GOUT, RHEUMATISM, SORE THROAT, CHEST AFFECTIONS.

SIR MORELL MACKENZIE wrote, December 9, 1887:—"I have much pleasure in stating that I have made use of Oleum Pumilionis during the last twenty-five years that I consider it a most valuable preparation. It acts as an admirable tonic to the mucous membrane of the air passages in cases of chronic bronchitis and laryngeal catarrh. I am glad, therefore, to hear that the remedy is about to be used on a large scale, and I have no doubt the results will be highly satisfactory. (Signed) "MORELL MACKENZIE, M.D."

PUMILINE **ALONE,** with the single exception of Pinol, possesses the physical and chemical properties which give it the faculty of being administered internally with **SAFETY.** It is, therefore, essential for Chemists to use Pumiline as it is the only preparation obtained from snow-grown Pumilio Pines.

FOR TRADE PRICE LISTS, PAMPHLETS, ANALYTICAL REPORTS, &c.—

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PELLETIER'S QUININE.

Sulfate de Quinine des trois Cachets, Pelletier, Delondre et Levaillant.

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MEUPHROSINE.

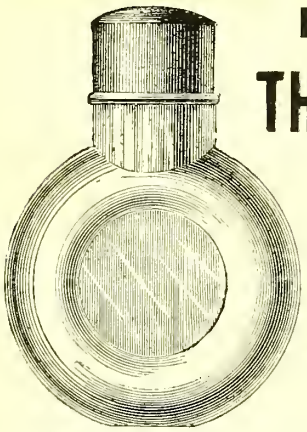
The Only Absolutely Safe and Certain Cure in all cases of

SLEEPLESSNESS

Caused by Nervousness, Overwork, &c.
Guaranteed to contain no Opium, Chloral, Morphia, Bromide, or Alcohol.
Does not affect the Heart's action nor disturb the Brain.
Price per Bottle, 2s. 9d.; post free, 3s.
Of all Chemists and of the Proprietors and Manufacturers,

S. RATTI & CO.,

3 Jeffrey's Square, St. Mary Axe, London, E.C



EXTRAORDINARY CHEAP LINE!!

THE WATCH SMELLING-SALT BOTTLE

PLAIN OR FLUTED.

These Bottles are fitted with **BEST SCREW NICKEL CAPS**, lined with Wa[illegible]e, and are **the most wonderful value ever offered.** A trial order will prove th[illegible]act.

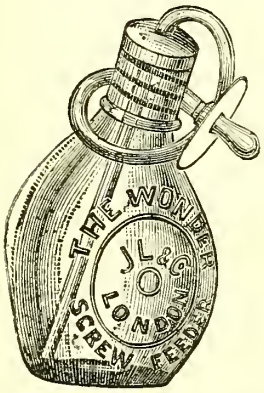
PRICE, IN BEST WHITE FLINT OR ASSORTED COLOURS, **12/6** PER GR[illegible]S, in not less tha[illegible] gr. lots

Orders may be sent through any of the Wholesale Houses, or direct to

E. A. HEARN & CO., Manufacturers of Glass [illegible]ottles of every descripti[illegible]

381-3 KINGSLAND ROAD, LONDON, E.

The annexed Illustration shows exact size of above-mentioned Bot[illegible]



GREAT REDUCTION IN PRICE OF GLASS BOTTLES, SYPHON[illegible] ETC.

ESTABLISHED TWENTY-FIVE YEARS.

Round Shoulder or Lime Juice Bottles.

½	1	2	3	4	6	8	10	12	16	20 oz.
2/9	3/3	4/6	6/	6/6	7/6	8/6	14/	15/	20/	22/ per gross

Vials (Long, Medium, or Short Series).
½ oz., 2/8; 1 oz., 3/; 2 oz., 4/6 gross. Good quality.

Kali (Confectioner's) Bottles.

4	6	8	10	12	20 oz.
6/	7/6	9/	14/	17/	24/ gross.

Glass Syringes (Best Quality).
½ oz., 14/; ½ oz., 18/; 1 oz., 27/; 2 oz., 49/ gross.

All and every kind of Bottle made, and prices given for any particular pattern.

Best White Flint Oval Dispensing or Perfumery Bottles.

2	3	4	6	8 oz.
6/	7/	8/6	9/6	10/6 per gross.

Best White Flats.

2	3	4	6	8 oz.
6/	7/	8/6	9/6	10/6 per gross.

Pill Bottles (Metal Screw Caps).
½ oz., 9/; 1 oz., 10/; 2 oz., 13/; 3 oz., 16/ gross.

Pomade Bottles (Metal Screw Caps).
1 oz., 11/; 2 oz., 14/6; 3 oz., 18/; 4 oz., 21/ gross.

Our Metallic Capsules are superior to anythi[illegible] in the Market.

[SPECIAL PRICES ON APPLICATION.]

SYPHONS: Block Tin Mounts, best in the trade, 19/ doz. f.o.b. Antwerp. SELTZOGENES: 5 pint, 14/ each

Syphons, [illegible]/ per doz. f.o.b. Antwerp.

WONDERFUL PRICES.

SCREW FEEDING BOTTLES, Black Fittings complete, 10 gross lots, 30/ per gross, open or in Cases.

J. LANG & CO., Glass Works, Alsace and Lorraine.
37 Quai Flamand, ANTWERP; and 28 Rue Notre Dame de Nazareth, PARIS.

SHOWROOMS AT 82 HATTON GARDEN, LONDON, [illegible].C.

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Druggist, Sundry and Perfumery Bottles of every description, Plain and [illegible]pered, in White, Blue, Amber, Actinic, Green, and other Colours. Also Me[illegible] capped Pomades and Screw-necked Feeding Bottles in Green or White Gla[illegible]

MOULDS MADE TO ANY PATTERN.

PERSEVERANCE GLASS WORKS, Homer Rd., South Hackney, LO[illegible]N, E.

QUITE A NOVELTY.

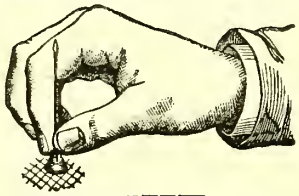
Styles 11A and 14A of Shirley's **A1 BRAND MENTHOL CONES** can now be h[illegible] with the following *Views along the back of the cases*:—Westminster Abbey, Tower of Londo[illegible], Paul's Cathedral, Windsor Castle, Westminster Bridge, and Houses of Parliament.

The full directions as to uses, &c., of the Menthols are printed on one side and the [illegible] on the reverse. The views are beautifully engraved, and render the cones the most saleable yet [illegible]oduced.

Country and Colonial buyers should not miss this opportunity. No extra is ch[illegible]d.

11a, 3/6 per dozen; 14a, 6/3 per dozen.

ARTHUR W. SHIRLEY (Late J. G. Shirley), **30 PATERNOSTER SQ., LON[illegible], E.C.**

Trade Mark.  Registered.

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12 PALL MALL EAST, LONDON, S.W.

SOLE AGENTS FOR DR. WARLOMONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.

HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes, two-thirds full, 1s. 8d. each; Tubes one-third full and Lancet-charged Points, 1s. each; Pin-points, 1s. 1d. each. Eighteen Charged Small Points, 5s. Tubes two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccinations daily, between the hours of 12 and 2, by the Consulting Physician, at the uniform fee of a guinea. P.O.O.'s (including postage, and crossed London and Westminster Bank), with orders, payable to

EDWARD DARKE, Secretary.

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DISPENSING BOTT[illegible]ES.

"I. & CO." BRAND

SPECIAL OFFICE NOW OPEN—
61 HALTON ROAD, ISLINGTON, LON[illegible]N, N.

3 and 4 oz. Bottles, I. & Co. Brand	..	6/6 per G[illegible]
6 and 8 oz. " " "	..	7/6 "
12 oz. " " " "	..	11/6 "

1½ oz. Vials, long, short, or medium. 4/3 per Gro[illegible]
Our Crystal Blue Tinted Bottles, 6 and 8 oz., 8/9 per [illegible]s.
National Feeders, first-rate, Screw Top, and Black Fitting[illegible] 3/6 per Doz., or 40/ per Gross.

ALL OTHER SIZES EQUALLY LOW.

I. ISAACS & [illegible]O.

GLASS BOTTLE MANUFACTURERS

Hope to receive a continuance of their friends' com[illegible]nds for the New Year 1888.

BREFFIT'S

WHITE FLINT GLASS MEASURES

Accurately Graduated. Cylindrical or Conical.

Size ...	½ oz.	1 oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Prices Unstamped per doz.	3/6	4/	5/	5/6	7/	7/6	8/	9/	10/	11/	12/6	14/	15/	18/

Stamped Certified Graduations, 3/ per dozen extra.

SOLE MAKERS:

INTERNATIONAL FEEDING BOTTLES

(REGD.).

GROUND-GLASS STOPPERED BOTTLES & GLASSWARE.

PATENT BALL STOPPERED AERATED WATER BOTTLES.

Dispensing Bottles and Glassware, &c.

PATENT MEDICINE PROPRIETORS' BOTTLES AND GLASSWARE.

PERFUMERY FACTORS' BOTTLES

GREAT VARIETY. LATEST DESIGNS.

OFFICES AND SHOWROOMS:

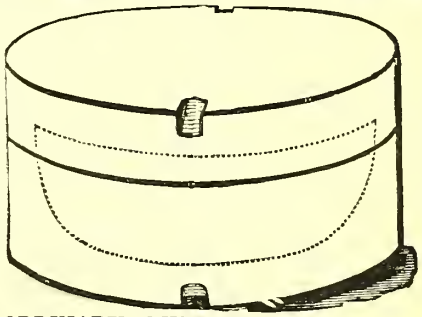
83 UPPER THAMES STREET, LONDON.

WILLIAM TOOGOOD'S
SPECIALITIES.

WAREHOUSE AND SHOW ROOM,
BURLINGTON BUILDINGS,
HEDDON STREET, REGENT STREET, LONDON, W.

TOOGOOD'S
IMPROVED PATENT
EARTHENWARE COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade.



Owing to the increasing demand for our Patent Pots, we have introduced a Special THIN Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

ORDINARY THICKNESS—

1 dr.	2 dr.	½	¾	1	1½	2	3	4	6	8 ounces.
1/6	1/6	1/6	1/7	1/8	1/10	2/2	2/10	3/4	4/6	6 per doz.

THIN for DISPENSING—

½	¾	1	1½	2	3	4	6	8 ounces.
1/7	1/8	1/10	2/-	2/4	3/-	3/8	5/-	6/- per doz.

TOOGOOD'S
BURNT-IN POTS,
FOR COLD CREAM, TOOTH PASTE, &c.

TOOGOOD'S
GRADUATED MEASURES.

TOOGOOD'S
BOXWOOD-TOP CORK BOTTLES

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TOOGOOD'S
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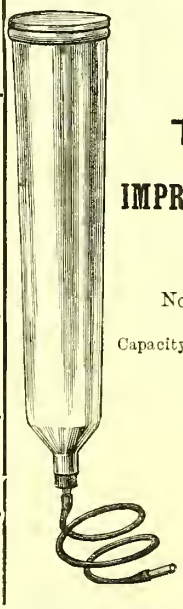

TOOGOOD'S
IMPROVED PERCOLATORS.

Nos.	1	2	3	4	5
Capacity	12	25	66	100	160 ozs.
	2/	3/	4/6	6/	7/ each

NORMAN'S
PATENT PILL COATER

The cheapest and most efficient machine yet introduced, combining simplicity with portability, and enabling small quantities of pills to be coated with the same facility as large.

It speedily saves its cost.

Price 3/ each.

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Telegraphic Address: "TOOGOOD LONDON."
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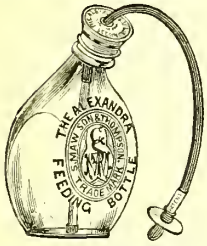
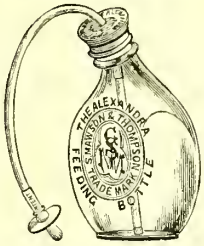
S. MAW, SON & THOMPSON'S
FEEDING BOTTLES.

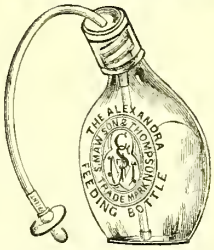
Alexandr Feeding Bottle,
Screw Meta Earthenware Cap.
per doz.



Alexandra Feeding Bottle,
Gilt Porcelain Cap.
20/ per doz.

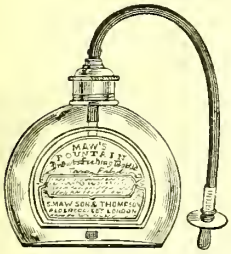


Alexandra Feeding Bottle,
Earthenware Cap.
11/ per doz.

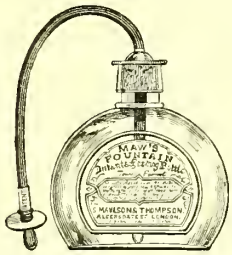


Alexandra Feeding Bottle,
Screw Glass or Earthenware.
Stopper, 11/ per doz.

Alexandr Feeding Bottle,
Eart ware Cap.
8 er doz.

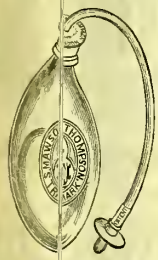


Fountain Feeding Bottle,
Screw Glass Stoppers.
20/ per doz.

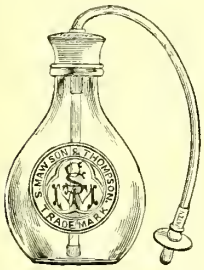


Fountain Feeding Bottle,
Screw Glass Stoppers.
12/6 per doz.

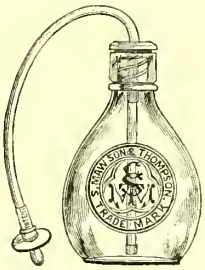
Alexandra Feeding Bottle,
Wood-Top Cork.
3/ and 3/8 per doz.



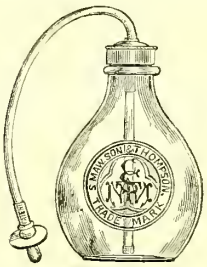
Oval Feding Bottle,
Eart ware Ca.
8/ r doz.



Export Feeding Bottle,
Earthenware Cap.
7/3 per doz.



Export Feeding Bottle,
Screw Glass Stopper.
7/6 per doz.

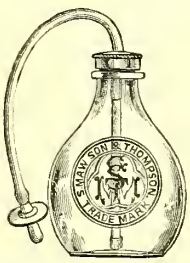


Export Feeding Bottle,
Screw Metal or Earthenware Cap.
9/ per doz.

Export eding Bottle,
Mal Cap.
4/6 er doz.

Export Feeding Bottle,
Wood-Top Cork.
2/9 and 3/6 per doz.

Export Feeding Bottle,
Screw Glass Stopper.
4/ per doz.



Export Feeding Bottle,
Screw Metal Cap.
4/6 per doz.

FOR FRTHER PARTICULARS SEE QUARTERLY PRICE CURRENT, PAGES 43 AND 47.

SECIAL QUOTATIONS TO WHOLESALE BUYERS.

. MAW, SON & THOMPSON, LONDON.

This Unique Preparation has the extraordinary property of keeping the

HAIR IN CURL,

Now used by Ladies in all parts of the World.

Needs but an introduction to command a ready and constant sale.

FRIZZETTA

(REGISTERED.)

RETAIL 1/6.

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Supplied by all London Pat Medicine Houses

Handsome Show cards, Glass Tablets, and Circulars profusely supplied

Foreign and Colonial Chemists should write for Terms, &c.

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BROOKS'S BAR, MANCHESTER
Telegraphic Address—"FRIZZETTA MANCHESTER."

OKELL'S ORIGINAL MONA BOUQUET

[Retail, 1/, 1/9, & 3/6; Wholesale, 7/,12/, & 22/6 per doz.

This much-admired Perfume (first introduced by the late Joseph Okell) may be obtained from the leading Patent Medicine Houses, Wholesale Druggists, and Druggists' Sundry Dealers.

Sole Consignee—THOMAS WEST, 59 and 61 Chester Road, Stretford, Lancashire.

Special Agents—B. G. LENNON & CO., London, and Port Elizabeth, Cape Town, and East London, South Africa.

IMPERIAL HAIR DYE.

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ONE LIQUID. — Harmless, Perfect, Perma t, and free from Smell. Clear, and without Sedir t.

Guaranteed to contain no lead, or any other noxiou gredient.

BLACK, BROWN, LIGHT BROWN, O GOLDEN.

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No 1.	1s. 0d. size	.. ..	7s. 0d. pe z. Nett.
No. 2.	2s. 6d. „	.. ..	17s. 6d.
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No. 5.	10s. 6d. „	.. ..	78s. 6d.

J. BRODIE, 41 Museum Street, **LONDO , W.C.**

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PERFECTL ARMLESS.

As recommend y the Medical Profession, an estified to by numerous Gen Testimonial

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TRADE MARK G.B.&Co BARBER'S ORIGINAL CRIMSON INK FOR MARKING LINEN G.B.&Co TRADE MARK

WHICH IS CHANGED BY HEAT TO A JET LACK.

Put up for Retail Sale in 6d., 1s., 2s., 2s. 6d., and 5s. Bo es.

Also Barber's Concentrated Liquid **COCHINEAL**, for Colouring Jellies, stards, &

Put up in 6d. and 1s. Bottles.

MANUFACTURED ONLY BY THE PROPRIETORS—

G. BARBER & CO., Club Moor, LIVER OOL.

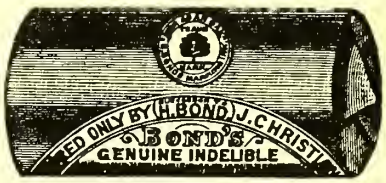
Can be obtained through any of the Wholesale Firms in Great Britain, or from FELTON, GR WADE & C Melbourne; ELLIOT BROS, Sydney and Brisbane; KEMPTHORNE, PROSSER & Dunedin a Auckland; FELTON, GRIMWADE & CO., Wellington; or direct from the Manufactu —G. BARB & CO., Club Moor, Liverpool, England.

HENRY BOND'S ORIGINAL "OAK TREE" MARKIN INK

Warranted to remain fluid in all Climates. Produces a brilliant unfading Bl k.

This valuable invention of the late HENRY BOND claims a preference over all others of the kind in the freedom with which it can be used, **with or without the application of heat,** and never any fear of injury to the finest fabrics.

Every vendor can safely recommend this Brand without fear of complaint, either as to quality or quantity. With view to guard against spurious imitations, **write for Christian Bond's "Oak Tree" Brand.**



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Two injunctions have been granted to H. Bond's legal successors, restraining the use of the name, "H. Bond's Marking Ink," one as recently as Nov. 17, 1882, against F. J. Bond.

TABLISHE 70 YEA n 1 dozen establishm Linen.

Ordinary Inks, in all convenient forms for Export and Counter Trade, 6*d.* and 1*s.* in blue wrapper, Red Trade Mark, boxed or carde 6*d.* and 1*s.* Pedestal, with Stretcher, in ½ dozen and 1 dozen boxes; ½ oz. and 1 oz. Stoppered Bottles, in boxwood case, for the use of lar 2*s.* 6*d.* and 5*s.* each. Complete Illustrated Price List on application. Write for handsome Showcard, Handbills, and Specimen

Liberal Discounts to Shippers and the Trade. *Sample Bottle supplied gratis and sent post-free to any part of the World on receipt*

To be obtained through all the leading Wholesale Houses in the United Kingdom.

Prepared only by J. CHRISTIAN, Sole Proprietor, 46 CITY ROAD, LOND , E.C.

GENUINE EMERY, EMERY CLOTH, AND BLACK LEAD.

JOHN OAKEY & SONS,

MANUFACTURERS OF

Glass Paper, Emery and Glass Cloth; Emery, Black Lead, Emery Wheels Pumice, Putty Powder, Crocus, Urn Powder, Tripoli, Rouge, Plate Powder, Steel Polish, Furniture Polish, Knife Boards, Brunswick and Berlin Black, &c.

OAKEY'S WELLINGTON KNIFE POLISH,

Prepared expressly for Oakey's Patent India-Rubber Knife Boards, Buff Leather Boards, and all the Patent Knife Cleaning Machines. Sold in Canisters with perforated Tops to prevent waste, at 1d., 2d., 3d., 6d., 1s., 2s. 6d., and 4s. each.

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A Magic Pomade for Cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Pastes. Tins 1d., 2d., 3d., and 6d, each.

WELLINGTON BLOCK BLACK LEAD,

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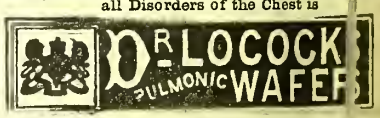

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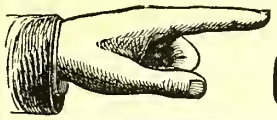

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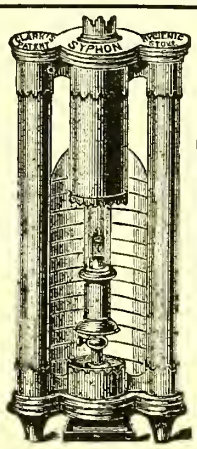

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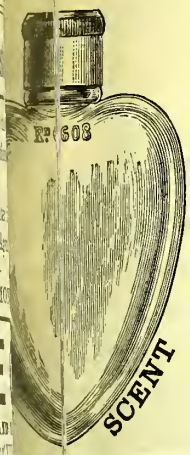

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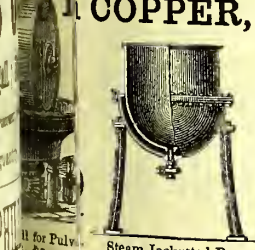

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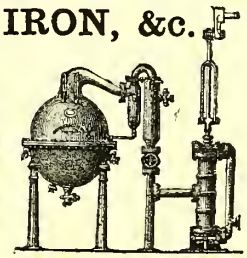

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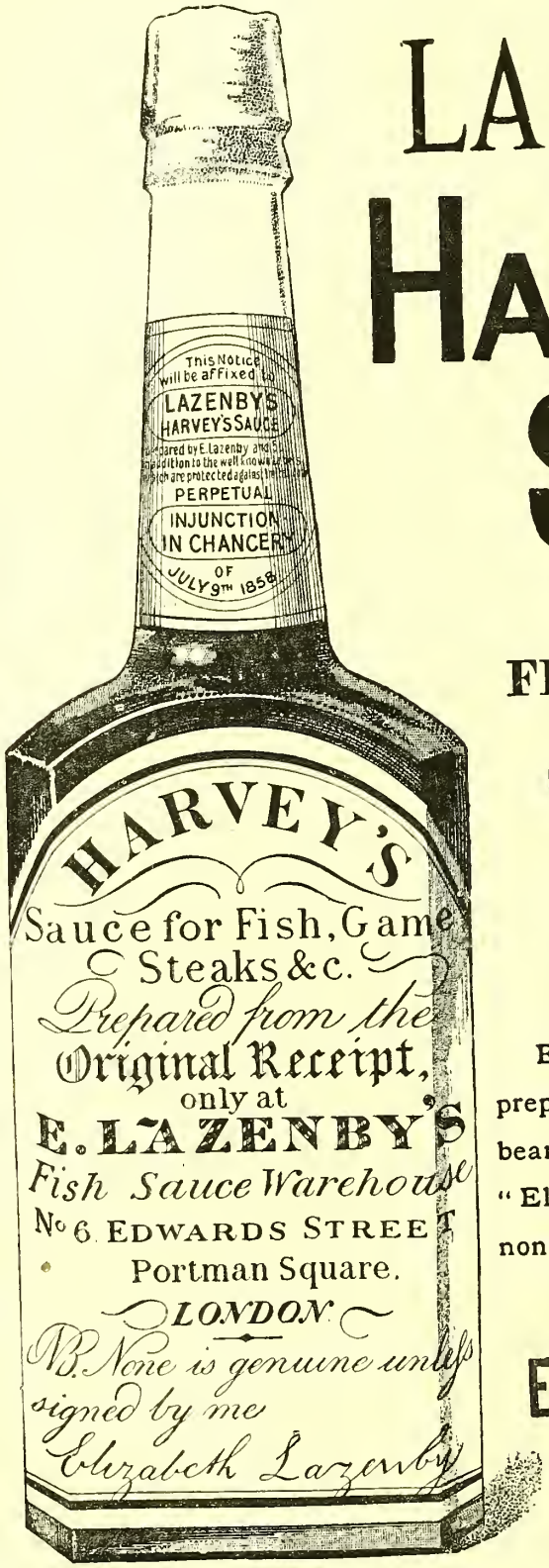

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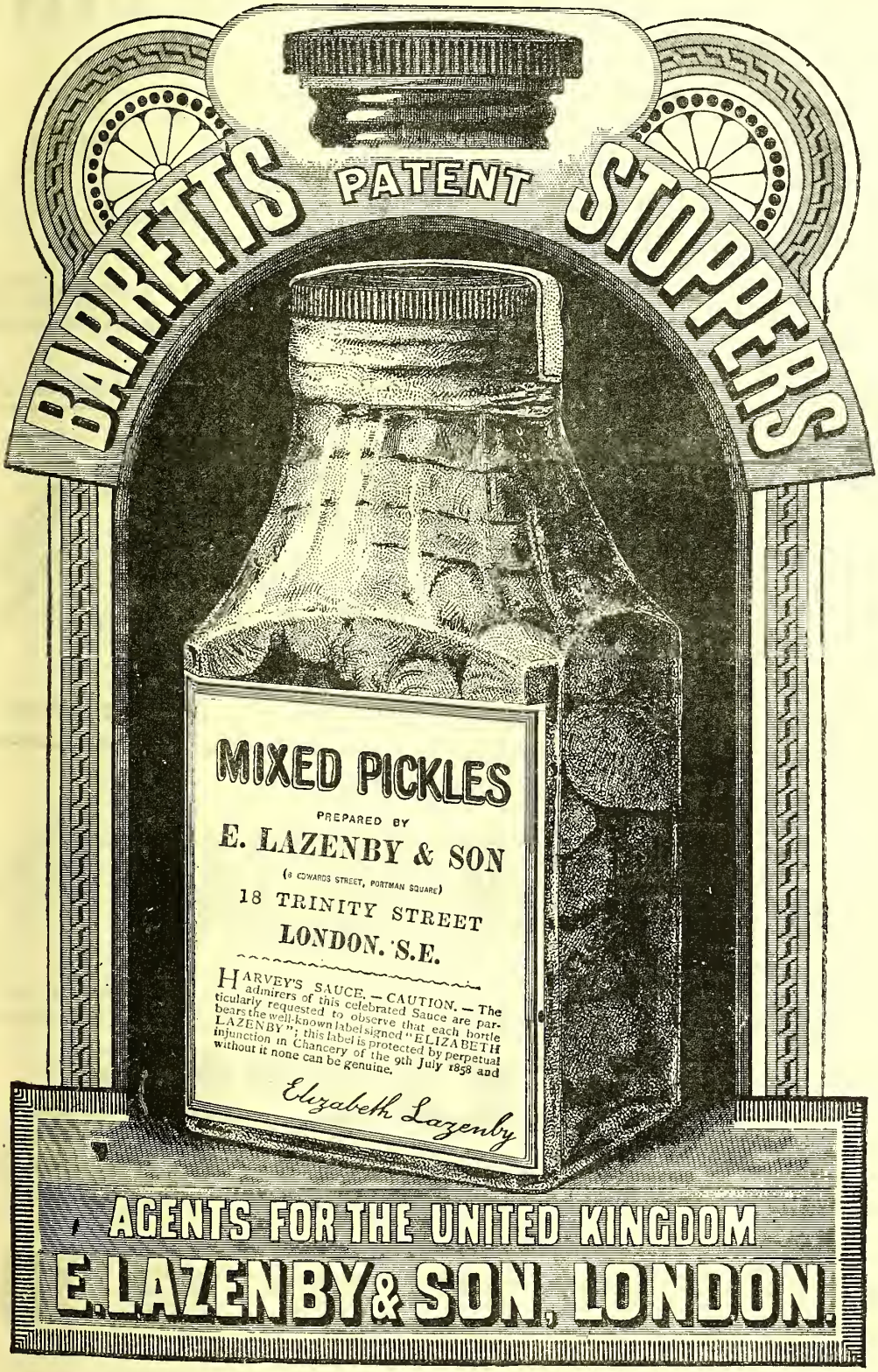
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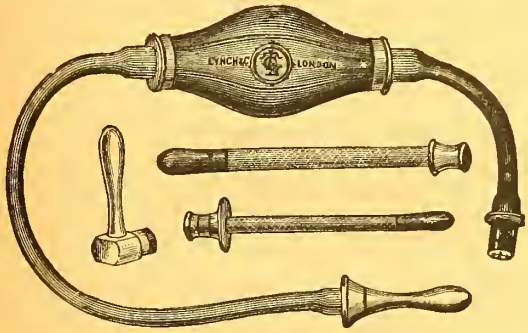

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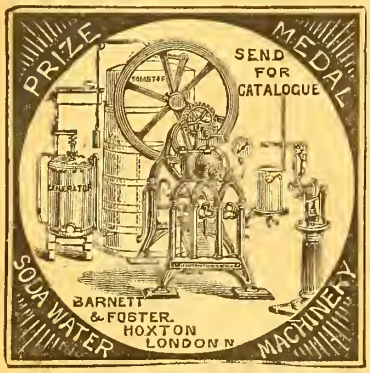
And all Appliances for the Manufacture of all Aerated Drinks in the highest state of perfection.



PRIZE MEDALS—London, 1862, 1873, 1874; Paris, 1867, 1878; Vienna, Philadelphia, Cape, &c. HIGHEST AWARD—Sydney, 1879-80.

FIRST-CLASS CERTIFICATES & 4 PRIZE MEDALS, CALCUTTA, 1883-84.

THREE GOLD, TWO SILVER, & TWO BRONZE MEDALS, INTERNATIONAL HEALTH EXHIBITION, LONDON, 1884. 5 FIRST ORDERS OF MERIT, ADELAIDE, 1887.

Our Machines are universally adopted throughout the world for the manufacture of all kinds of Aërated Drinks, whether in bottles, syphons, or counter fountains. There are in England alone over 2,000 factories where our Machinery is in use, besides many thousands in India and the Colonies. They are the simplest, safest, and cheapest for the purpose, and produce a high-charged gaseous water free from metallic or foreign contamination. All Machines have a Gasometer, and it forms a most important necessity where purity of product is required, as in this the gas is expanded and purified; it also removes the possibility of accidents by explosion, and avoids the necessity of complication—these we consider of greater importance than the saving of a few inches of floor space.

A complete Soda Water Plant, including Bottling Machinery for producing 100 dozen Lemonade, Ginger Beer, Ale, &c., per day, is supplied for £40.

ILLUSTRATED CATALOGUE FORWARDED FREE.

BARNETT & FOSTER,

26T Eagle Wharf Road, New North Road, London N.

Printed by Spottiswoode & Co., New-street Square; and Published at the Office, 42 Cannon Street, in the City of London.—March 10, 1888

THE CHEMIST & DRUGGIST
SUPPLEMENT.

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, FEBRUARY 4, 1888.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested that these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 8 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the issue of the Saturday following.

All advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE, and crossed MARTIN & CO.

OFFICES: 42 CANNON ST., LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The Business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

—£1,000.—**LONDON, N.W.**—First-class Dispensing and Retail; capital situate in prominent position; returns rather over £1,000 yearly, *with profit about 30 per cent.*; good-sized house in perfect repair; lease, including long lease, £1,150; personal applications will have preference.

—£900.—**LONDON, S.E.**—Vendor going abroad; good-class Retail, Dispensing, and Prescribing; returns rather over £900 yearly, *net profit above average*; comfortable house, rent very low, on lease; price fixed £900.

—£700.—**LONDON, S.E.**—Good-class Dispensing and Retail; established 20 years; wants the attention of a principal for development; returns £800; good house and garden; price £700.

—£500.—**LONDON SUBURB, S.E.**—Light Retail and Dispensing; returns £500 yearly; good remunerative business; well-fitted, comfortable house, and small garden; price about one year's returns.

—£2,000.—**PROVINCIAL TOWN, MIDLANDS.**—Retail Dispensing Business; returns over £2,000, *with first-class profit*; special position; a good opportunity for two gentlemen as partners; about £2,000 required.

—£1,350.—**NORTH OF ENGLAND.**—Good town; old-established fitted shop; capitally situate in chief street; returns average £1,350 yearly, from profitable good-class business; valuation terms to be arranged; no premium required for goodwill.

—£550.—**LIVERPOOL.**—Dispensing and Retail; well-established; held by vendor for more than 11 years; returns between £500 and £600 *net profit*; corner shop, well fitted, rent low; price £350.

8.—**£1,000.—HOME COUNTY.**—Profitable Dispensing and Retail, with good Proprietary articles, for which there is a good demand; average returns nearly £1,000; house is convenient and situate in a good thoroughfare, and commands the better-class trade.

9.—**£250.—WALES, ON BANKS OF THE SEVERN.**—In a pretty locality, a good-class business, capable of great extension; present returns about £250, entirely from Drug trade; shop well fitted, and commodious house; Welsh not necessary; value of stock and fixtures only required.

10.—**£1,350.—SOUTH COAST.**—Watering-place; first-class business, Retail and Dispensing, with handsome double-fronted corner shop; returns between £1,300 and £1,350; price about £1,100; particulars on application; references must be enclosed.

11.—**£500.—NORTH OF ENGLAND.**—Large and flourishing seaport; an old-established business; present returns £500 yearly, from Retail and Dispensing; capital nucleus for heavier trade; value of stock and fixtures only required.

12.—**£1,900.—SUSSEX.**—Mixed Agricultural Business; good position; ample room for extension by a pushing man; returns average about £1,900 yearly; ample business premises and large residence; price about £1,450.

13.—**£700.—SEAPORT (WEST).**—Handsomely-fitted shop, with good-class business, largely with own specialities; returns about £700 yearly, can be largely extended; commodious and good house; valuation only required.

14.—**£1,700.—MIDDLESEX.**—Dispensing and Retail, with good-class Mineral Water trade, admitting of very considerable extension; returns averags about £1,700 yearly, *with net profit over 30 per cent.*; handsome shop and good house; good investment for partnership; about £1,600 required.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms, where business of a confidential nature requires the especial attention of a London agent.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

BUSINESSES WANTED.

3s. 6d. *fifty words; 6d. for every 10 words beyond.*

VENDOR having £300 cash wants shortly a good ready-money Retail and Dispensing Business, above sum would be accepted, and remainder by instalments as arranged; must be in good and healthy suburbs; good town or its suburbs preferred; must bear strict investigation and a month's trial; no agents. Address, giving all particulars, K., 17 Latham Street, Preston.

A LIGHT Retail and Dispensing Business returning from £900 to £1,500, or more if part can remain for a time; no agents; strict confidence observed; cash ready. "Bonâ-fide," care of Messrs. Southall Bros. & Barclay, Wholesale Druggists, Birmingham.

WANTED.—Advertiser, having £200 cash, wants a good Ready-money Retail and Dispensing Business, where above sum would be accepted, and remainder by instalments as arranged; must bear strict investigation, and in good and healthy neighbourhood. Address, giving full particulars, "Ivor," 59 St. John's Wood Terrace, London, N.W.

PARSON C. BAKER,

8 STOCKBRIDGE TERRACE, S.W.

(CLOSE TO VICTORIA STATION),

Twenty-five years' experience, Transfer, Wholesale and Retail.

WANTED to purchase in London or Suburb, light Cash Retail, returning from £1,000 to £1,500; also a good Country Business with opening for dentistry; capital at command £400.

FOR disposal, Country Wholesale; South Coast; no opposition, and rapidly increasing returns; capital required £1,000 to £1,500. Also an old-established Retail, in principal thoroughfare large Midland town; returns over £350; price £270.

A GENTLEMAN, of good business experience, desires to employ part of his time in London as Representative or Agent; references given and required.

OLD-ESTABLISHED Retail in principal thoroughfare, large town, Midland county; good house; returns over £350; price under £300.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

AN old-established Prescribing and Dental Business to be disposed of; satisfactory reason for leaving; price £160. Apply, Mollis, care of Evans, Sons & Co., Liverpool.

FOR sale, a small Chemist's ready-money Retail and Prescribing Business in a populous neighbourhood; rent low, with option of lease; price £60, including stock and fixtures; would suit a pushing man with small capital. Particulars of A. B., 6 Lewisham High Road, New Cross, S.E.

FOR immediate disposal, a Wholesale Drug and Mineral Water Business, in the Potteries; good profits; no previous knowledge or examinations necessary; price moderate, and part could remain. Apply by letter to M., care of Messrs. Wyleys & Co., Wholesale Druggists, Coventry.

TO be sold immediately—satisfactory reasons—Prescribing and Retail Business, with Dentistry; West of England fashionable watering-place; superior position and good house; price nominal; fixtures can be taken or rented; a splendid opening. Particulars of A. B., care of Mr. Bully, Chemist, Exeter.

£140.—Recently established good-class Business, doing exceedingly well, in western suburb, for disposal, through ill-health; large convenient house, held on lease; low rent, which can be more than covered by letting part off; this is an unusually good chance for small capitalist. Taylor, 79 Queen Street, Cheapside, E.C.

CHESHIRE.—A genuine Light Retail rug Business at Frodsham; good profits; now under management; could be doubled by principal; increasing neighbourhood and healthy situation; making great improvements in house; rent £25; price £200; strict investigation and inspection invited. Apply, Geo. Marshall, Chemist and Dentist, Runcorn.

A RETAIL, Dispensing, and Prescribing trade, returning £700; no heavy trade done; in good market town, West of England; excellent house and garden; established 50 years; several valuable proprietaries; net profit averages £300; excellent chance for energetic man; good opportunity for dentistry; price £425. F. B. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LANCASHIRE.—To be disposed of at once, the Business of a Medical Botanist and Specialist, together with Surgical and Magnetic Appliances; shop nicely fitted; in leading thoroughfare of a populous town, centre of cotton district; average returns, £230; profits unusually large; convenient house, rent £35; established 3½ years; lowest price, £75, being half a year's profit; ill-health cause of disposal. Apply, 154/9, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

CHEMIST and Druggist's Business for dispo Bristol; established 70 years; well situ ed; 1 scriptions last year; fittings, fixtures, and st k, £120, chance, seldom met with; double plate-glas orner s eight-roomed house; rent £28. Apply, J. hbridge, ness Broker, 139 Fore Street, Exeter.

AINTREE.—For disposal, that well-fit d Dispen and Light Retail Business, situate Walton Aintree; built for the business, and good use; as o wishes to retire, will be sold either with o without and payment made according to arranger nt agreed Apply, Mr. Heaton, Chemist, 14 Exchar Street, Liverpool.

COUNTY Town, main thoroughfa —Good profitable, small, ready-money Dispen g, &c.; n all full prices; house, shop, fixtures in ni order; v taking larger will accept purchase beyond £150 by 1 ments from young man of business habits w recomme 153/39, Office of THE CHEMIST AND DRU IST, 42 Ca Street, E.C.

BY Order of the Executors.—Genuin ld-establ Retail for disposal in consequence of d h of prepr S.E. district, densely populated thorough e; profits £200 per annum; full prices obtained; years' le nominal rent; every investigation and erences; suit outdoor assistant to manage with w to pur Letter first, W., 55 Kirkwood Road, Nunhe , S.E.

HULL.—For immediate disposal, neatly Chemist's Shop in a densely-popula l part, w good prescribing business may be cultiva d; an ex opportunity for anyone commencing, an special te an immediate purchaser; price £40 in ding sto fixtures. Apply, for fuller particulars, W. Ro Chemist, Myton Place, Hull.

EXCEPTIONAL opportunity. — Old-esta genuine Chemist's Branch under n nagement market town near Birmingham; return £400; p could soon double; no patents, and feeble pposition shop, well fitted and stocked; good hou opening seldom presents itself to principal or beg er; pric half cash, balance instalments. "Drugs, are of W Co., Coventry.

TO Chemists and Druggists.—To l dispo first-class Retail and Dispensing Bu ess, near head; established over 12 years; shop we tted up; about £600 per annum; a capital opportu for an en person; price for premises £470, and goodwill, fixtures, &c., £400 For further particu s apply Thompson, Wholesale Druggist, 53 Han r Str pool; or to Roose, Mahon & Howorth, Cha red Acco 26 North John Street, Liverpool.

AUSTRALIAN Business; best sition in bourne; turnover £2,700, incr sing; fi Chemist's Business, centre of city; har ome shop about 5 years, for which the present roprietor £1,500; last year's returns about £2,700, iefly cash bility of further increase unlimited; pre t owner from business; stores not allowed t ell me li Melbourne; every facility allowed for in tigation, qualifications accepted by Victorian Pha acy Bou £2,750. References and particulars wit rimwada & Co., Mildmay Chambers, 82 Bishopsgat Street, Lo

IMMEDIATELY.—In consequen of the Mr. William Vaughan, the goodwill, ock-in-tr fittings of a genuine old-established Re l and Pre Business, together with W. & A. Gilbey's gency, es and carried on by the late proprietor ove 0 years Square, Fishguard, in the county of mbroke; house; shop well fitted; warehouse conve splendid garden commanding fine view bay; the are situated in the best position in the n, being the market house. For further particu s apply Jno. Vaughan, Solicitor, Fishguard, Pem

PARTNERSHIP.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

£200—Partnership.—Advertiser wishes to meet with reliable man, qualified or unqualified, to take sole management of an unopposed good-class family and prescribing business; prominent main road position, surrounded by good-class families, near densely populated locality; undeniable good opening for an energetic man. "Chemist," Lordship Terrace, East Dulwich.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

DISPENSER required; indoors; unmarried. Apply by letter to "Medicus," Messrs. Baiss Brothers, Jewry Street, Aldgate, E.C.

Assistant Junior, of good address; must be accurate and quick Dispenser. Apply, stating full particulars, to W. E. Hayes, Chemist, Hereford.

WANTED at once, a good Man to take charge of a brisk small class retail chemist's business; hours 8 A.M. to 9 P.M., no Sunday duty; lock-up shop. Tyrer, 10 Long Lane, Borough.

WANTED, an Assistant, not under 23 years of age, for good-class Business; one only kept; must be experienced in Dispensing, write a neat hand, and have a good address; indoors, but sleeping in lodgings. Address, Th. C., Mrs. Hodgkinson's, 198 Upper Whitecross St., E.C.

WILLIAM HESELTINE & SON, Wilson Street, Finsbury, E.C., are open to engage a first-class man to introduce and appoint Chemists as Agents for their Teas; liberal terms to one having necessary qualifications (see full page advertisement appearing in this issue). Apply by letter, as above, in first instance.

MANAGER wanted, with extensive commercial experience, competent to take management of and develop dispensary and general business abroad; must be qualified and have highest references; fine opening for thoroughly capable man, 30 to 35. Apply by letter to M. 887, Messrs. Deacon, Leadenhall Street.

WANTED, a competent man as Agent, by a large manufacturer of suspensory bandages, &c.; preference given to those who call upon druggists' sundrymen and sport firms; good references required; good commission given. Write particulars to Z. Z. 100, care of Housekeeper, 9 Mark Lane, E.C.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

ASSISTANT; good experience in first-class business. "Alpha," Corfe, Chemist, Maidstone.

EVENING Engagement wanted. Letter, "Lac," 186 St. John Street, E.C.

ASSISTANT; over 3 years' West End experience; aged 22; Major; disengaged. D., 63 Lupus Street, S.W.

MANAGER or Senior; outdoors; disengaged; aged 25. "Chemist," Charlton Street, Llandudno.

JUNIOR aged 22; Minor qualification; excellent references. 13 Garden Street, Carlisle.

MANAGER or Locum-Tenens; 30 years' experience; disengaged. J. C. Collie, Drybrook, Glo.

JUNIOR; aged 20; 6 feet; over 3 years' experience. X. Y., 68 Hudson Road, Southsea, Hants.

JUNIOR; aged 22; time for study; town. Kingstone, 96 Windmill Road, Croydon.

ASSISTANT; aged 22; qualified; good reference. F. B. Birks, Girlington, Bradford, Yorks.

ASSISTANT; managed business in N. district last; aged 22; good references. W., 5 Liverpool Street, E.C.

AS Junior. S. H. Keys, 88 Iffley Road, The Grove, Hammersmith.

AS Assistant; 8 years' experience; aged 24. Jones, 20 Moriah Street, Rhymney.

JUNIOR; 5 years' experience; abstainer; excellent references; aged 21. Havard, Ledbury.

JUNIOR; aged 22; height 5 ft. 10½ in.; satisfactory references; disengaged. T. Davies, 1 Pier Ter., Lowestoft.

MANAGER or Temporary; first-class reference; registered; 8 years in last situation. Address, R. C. D., 10 Lodge Avenue, Mortlake, Surrey.

JUNIOR; aged 21; Dispensing and Family business; disengaged February 11; satisfactory reference. Harding, Hargate Lane, West Bromwich.

AS Junior; aged 21; height 5 feet 3½ inches; 5½ years' experience; outdoors preferred. Brooke, 22 Great Portland Street, W.

JUNIOR; aged 19; 3 years' experience; disengaged; salary £16 to £20; passed Preliminary. V., 35 Elphinstone Road, Hastings.

ASSISTANT; good-class Retail and Dispensing; disengaged; height 5 ft. 10 in.; aged 27. "Chemicus," 223 Old Christchurch Road, Bournemouth.

MANAGER for Widow; experienced dispenser; middle-aged; registered. Geo. Ramsden, Newport, Salop.

AS ASSISTANT; town or country; immediately; 20; well recommended; abstainer. W. H. F., Mr. Griffith, High Street Pharmacy, Weston-super-Mare.

J. MASON, Chemists' Temporary Manager and Assistant, Oxford, wishes for an immediate engagement; terms greatly reduced during winter; good references.

ASSISTANT, or Branch Manager; aged 24; 8 years' experience; satisfactory references; married; North preferred. A., 2 Retreat, Sunderland.

LONDON.—In or outdoor; as Manager or Assistant; aged 25; good experience; excellent references. "Statim," 78 Falkner Street, Liverpool.

COMPETENT Assistant; 9 years' experience; good references; aged 25; height 5 feet 11 inches. L. B., care of A. Buswell, Chemist, Lutterworth.

JUNIOR or Improver; aged 20; tall; accustomed to mixed business. "Junior," Mr. Bobby, Chemist, Soham, Cambs.

THOROUGHLY useful man wants situation in good Wholesale Drug Warehouse or laboratory; well recommended; experience varied. "Assistant," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT; aged 26; Major; fluent French; London and Paris experience. E. Timm, Jun., The Mills, Goole, Yorks.

AS Manager; outdoors; aged 37; married; good references. Boas, Mr. Saunders, Orford Road, Walthamstow.

ASSISTANT; tall; aged 20; 3 years' experience; extract teeth; London preferred; excellent reference. H M., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS Junior; 6 years' experience; good reference; aged 20 years; when writing, please state full particulars. W. Cumming, St. John's Road, Corstorphine, Edinburgh.

ASSISTANT; qualified; 23; home counties or town; outdoors; permanency preferred; good London experience; used to bookkeeping. "Incubu," 34 Endymion Road, Brixton Hill, S.W.

MANAGER, to reside on premises; aged 35; married; tooth extractor, prescriber, qualified all round; at liberty at a month's notice; present situation nearly 4 years; satisfactory reasons for wishing to change; previous two situations 7 years and 2 years; undeniable references. 151/36, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

SOLE District Agency (Wholesale or Retail) desired for goods suited to Drug, Grocery, or Drysaltery Business. Address, J. P. R., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

HIGH-CLASS Dental Work for the profession, or chemists and dentists; charges from 1*s.* per tooth, including materials; orders despatched immediately. Mr. Brown, 20 Norman Road, St. Leonards-on-Sea.

BRINE & CO.'S Hop Pillows and Beds, Hop Compresses for throat and chest; sold by all principal chemists; fine Kent Hops for all purposes. Manufactory, Hawkhurst, Kent. Price-list on application.

A CHEMIST offers Furnished Apartments; good unbroken land views, with sea; South Coast; good house, and good home; would suit invalid; bracing air; usual commission given. 154/3, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AGENTS are required by an Italian establishment for the sale (Wholesale only) of Olive Oil on the markets of London and Dublin. Offers, accompanied by first-class references, must be addressed to 233/58, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PHARMACEUTICAL Prelim.—Fridays, 8 till 10, by V. Butler Smith, B.A., B.Sc. London, £1 1*s.* per term; also preparation for Matric. and Medical Prelim., day and evening. Full particulars on application to R. Mitchell, Secretary, Polytechnic, 309 Regent Street.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

A VALUABLE SPECIAL AGENCY.

DR. BIRLEY'S Preparations.—Large and Ready Sales.—48 page Pamphlets, gold c ers, show-cards, &c., free; write to-day for samples. G lon Murray & Co., 50 Theobalds Road, Holborn, W.C. S agents for Great Britain and India. "Baby's Blessing" and "Anti-Catarrh" may also be had.

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1*s.* How to Write an Essay, 3*d.* Cæsar Simplified, 1*s.* Knotty Points in Latin Grammar, 1*s.* 6*d.* MINOR—Equations Simplified 1*s.* Illegible Autographic Prescriptions, 1*s.* Notes on Dispensing, 1*s.* Prescriptions given at the Minor, 6*d.* "Chemist," care of Mr. J. Edwards, Wye, Kent.

NOTICE OF MEETING.

THE Anglo-Foreign Banking Company (Limited).—Notice is hereby given, that the ordinary general meeting of the shareholders of the Anglo-Foreign Banking Company (Limited) will be held on Thursday, February 23, 1888, at 12.30 P.M., at the offices of the company, 2 Bishopsgate Street Within, London, to receive the report of the directors and the accounts for the year ending December 31 last, to declare a dividend, to elect directors in place of those who retire by rotation, to appoint two auditors, and for general purposes. The transfer books will be closed from the 16th to the 23rd February inclusive. Holders of share warrants claiming to be present or to vote at this meeting must deposit their warrants with the Secretary seven clear days before the 23rd inst. By order of the Board.

WALTER BAXTER, Secretary.

2 Bishopsgate Street Within, E.C.
February 1, 1888.

New Edition (Third). Re-written and Enlarged.

NOTES ON DISPENSING

For Pharmaceutical Students. By GEO. STIRLING.

The book treats of the manipulation of Mixtures, Emulsions, Suppositories, &c., with a special section (now containing over 120 references) on Difficult Pills and Excipients, Pearl-coating, &c. Interleaved for MS. notes. Post free, 1*s.* 1*d.*

DOSES OF B.P. 1885,

Compactly arranged for vest pocket. Easily mastered. Post free, 6 stamps.
JOHN GOWER, Publisher, 47 Sigdon Road, Hackney, London.

FINEST COLLODION

For Surgical Purposes. Silky Fibre or Silk Cotton (from Eriodendron Anfractuosum). Supplied in large quantities by

J. P. WILLIAM & BROTHERS,
HENERATGODA, CEYLON.

Estab. 1875. **OTTO WOLTERS,** Estab. 1875.
MANUFACTURER OF
ANALYTICAL, VACUUM, AND BULLION BALANCES.
Wolters' Improved Short-Beamed Analytical Balance,
A SPECIALITY. Assay and other Weights of every Description made to Order. Balances for Exportation.
55 Up. Marylebone Street, Portland Place, London, W

OUR WEEKLY SUPPLEMENT.

We have prepared a set of forms for small advertisements (assistants wanted, businesses for disposal, exchange column, &c.). With these are attached tables of useful reference matter (Sale of Poisons, Postal Information, Annual Licences, Metric Weights, Measures, Medicine Stamps, Law and Public Offices, &c.). We shall be glad to send one of these sets to any subscriber who will send us an addressed postal wrapper (bearing a halfpenny stamp). As the object of this production is to encourage the insertion of such advertisements as we have named in THE CHEMIST AND DRUGGIST, we hope this offer will be taken advantage of chiefly by those subscribers who are willing to use this journal whenever opportunities occur.

OFFICES: 42 CANNON STREET, LONDON, E.C.